

DEPARTMENT OF THE AIR FORCE

TACTICAL AIR COMMAND

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**FINAL
ENVIRONMENTAL
IMPACT STATEMENT**



DISTRIBUTION STATEMENT A

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**FLIGHT OPERATIONS IN THE SELLS
AIRSPACE OVERLYING THE TOHONO
O'ODHAM INDIAN RESERVATION AND
ORGAN PIPE CACTUS NAT'L MONUMENT**

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AUGUST 1988



DEPARTMENT OF THE AIR FORCE
WASHINGTON, D.C. 20330-1000

OFFICE OF THE ASSISTANT SECRETARY

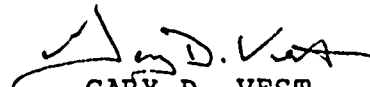
AUG 23 1988

TO: ALL INTERESTED GOVERNMENT AGENCIES, PUBLIC GROUPS, AND
INDIVIDUALS

We are pleased to provide you a copy of Volume 2 which completes the Final Environmental Impact Statement (EIS) for Flight Operations in the Sells Airspace Overlying the Tohono O'Odham Indian Reservation and Organ Pipe Cactus National Monument. The Final EIS consists of the Draft EIS (Volume 1, previously provided) and enclosed (Volume 2) summary, comments, replies and errata. The document is provided in compliance with the regulations of the President's Council on Environmental Quality.

If further information is required, please contact:

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GARY D. VEST

Deputy Assistant Secretary of the Air Force
(Environment, Safety and Occupational Health)

1 Attachment
Final EIS, Vol 2

Accession For	
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COVER SHEET

A. Responsible Agency: United States Air Force

B. Action: Continued flight operations in the Sells Airspace overlying Tohono O'odham Indian Lands and Organ Pipe Cactus National Monument in southern Arizona.

C. Responsible Individual: Captain Joseph J. Gradney, HQ TAC/DEEV, Langley AFB, Virginia 23665, Telephone (804) 764-4430.

D. Designation: Final Environmental Impact Statement (FEIS).

E. Abstract: The Air Force flies supersonic flight operations in the Sells Military Operations Area (MOA)/Air Traffic Control Assigned Airspace (ATCAA). A review of the existing supersonic waiver to conduct supersonic flight operations below 30,000 feet Mean Sea Level (MSL) was accomplished.

This FEIS provides responses to written and oral comments received in the 1979 Draft Environmental Impact Statement (DEIS) and 1986 Revised Draft Environmental Impact Statement (RDEIS) public comment periods. These documents cover current and future Air Force and Air National Guard (ANG) aircrew training over Tohono O'odham Lands and Organ Pipe Cactus National Monument (OPCNM).

Several alternatives were reviewed to include the no-action option. These alternatives were broken down into low altitude flight training and Sells Airspace supersonic training sections. In the low altitude section, the RDEIS reviewed establishing flying routes at other bases, rerouting military training routes, (MTRs) raising the minimum altitude on MTRs, discontinuing low level navigation flying, and developing additional routes. The supersonic training alternatives included transferring supersonic training to other MOAs/ATCAAs or restricted areas, raising supersonic training floors, discontinuing training, and establishing a new training area.

The primary environmental concerns of supersonic flight operations are the effects of sonic booms on human health and annoyance, wildlife, structures, cultural resources and recreational activities. It is projected that an individual underneath the airspace would hear an average of less than one boom per day, and would be very unlikely to hear three or more booms per day. Sonic boom overpressures would range from one to five pounds per square foot (psf), with the average carpet boom being two to three psf. Infrequent focus booms could occur in the area.

Each environmental attribute was analyzed to a depth sufficient to determine if the potential impacts would be significant. The local populace perceives significant impacts on lifestyle due to noise. No significant impacts were identified on socioeconomic or health aspects. Potential long-term health effects of loud noise are a debatable issue. Some researchers believe there is a link between loud noise and ill health, however, this is contrary to the consensus of the scientific community at this time.

F. DATE MADE AVAILABLE TO THE PUBLIC: _____

SUMMARY

1. Introduction: The Air Force's preferred alternative is to continue military flight operations in and under the Sells Airspace which overlies Tohono O'odham Lands and the Organ Pipe Cactus National Monument. Types of flight operations include supersonic flights from 10,000 feet MSL and above in the Sells MOA, subsonic flights at speeds exceeding 250 knots at levels from 3,000 feet AGL and above in the Sells MOA, subsonic flights at speeds exceeding 250 knots in designated MTRs, and subsonic flights at speeds below 250 knots in all areas, except those specifically designated as no-fly zones by the Air Force, at levels down to 100 feet AGL. Air Force use of the area does not include any air-to-ground targeting, either with or without ordnance.

2. Public Review: The review process took place in two phases, review of the DEIS in 1978/79, and RDEIS in 1986. Questions, comments, and responses offered for both documents are included in this FEIS.

The public review and comment period for the DEIS began in February 1979 when the Notice of Availability was published in the Federal Register. The comment period ended in April 1979 after a public hearing was held at the Santa Rosa Indian School near Santa Rosa, Arizona, on 27 March 1979. The public review and comment period for the RDEIS began on 6 June 1986 when the Notice of Availability was published in the Federal Register. The comment period ended on 1 December 1986 after a public hearing was held at the Santa Rosa Indian School, Arizona, on 25 October 1986. During these comment periods, oral and written comments were solicited. Oral comments were taken at the public hearings while the written comments were forwarded to the Headquarters Tactical Air Command Environmental Division.

The Air Force's response to these inputs consists of individual responses to the comments and questions submitted in both phases of public comment. These responses may be found in Section 3 of this FEIS. In addition, an errata sheet, found in Section 4 of this FEIS, provides factual corrections and updates to the RDEIS. Since changes in the RDEIS are minor, the FEIS consists of the RDEIS, public comments (including transcripts of both hearings), the errata sheet, this summary, and a list of preparers.

3. Summary of Environmental Impacts: The environmental impacts are the result of the aircraft flying greater than the speed of sound and flying at low level at subsonic speeds. Currently, the Sells Airspace is used primarily by Air Force and Air National Guard units in southern Arizona for flight training at subsonic speeds and at supersonic speeds from above 10,000 feet mean sea level (MSL) to 30,000 feet MSL and higher. The impacts are air pollutants, low level jet noise, and sonic booms.

The Arizona State Department of Health Services has reported air quality within the Sells Airspace to be in compliance with federal and state ambient air quality standards, with the exception of total suspended particulates (TSP), sulfur oxides, and carbon monoxide. Calculations of aircraft-contributed pollutants compared to observed pollutant loading indicate minimal impacts from these operations. Air quality is not expected to change substantially due to projected increases in aircraft operations.

The primary concerns of local residents are the effects of low level training flights and sonic booms on people, domestic animals, and wildlife. The subsonic noise impact beneath the Sells Airspace results primarily from low level training flights flown along military training routes (MTRs) and in low altitude tactical navigation (LATN) areas. The number of sorties flown on MTRs in 1985 was 5323 sorties, about 22 per day. This is expected to increase to about 8900 sorties per year (about 40 per day) by 1990. The number of LATN sorties flown in 1985 was about 14,400 sorties, about 64 per flying day. This is projected to remain constant through 1990. This level of low altitude activity would produce no quantifiable change in day-night average sound level (DNL) for nearby communities due to designated avoidance areas around these communities.

The impacts of subsonic noise would be greatest in those remote areas where several MTR segments coincide. A worst-case estimate of current noise levels in these areas, assuming all aircraft would pass over the same spot on the ground in a 24 hour period, results in a DNL of 61 dB. This is expected to increase to a DNL of 66 dB under the segments by 1990. However, a more realistic scenario is that 25% of the flights would pass over the same spot on the ground in a 24 hour period. This results in a current DNL of 55 dB and a projected 1990 DNL of 60 dB. At these levels no hearing or health effects are expected.

To determine the effects of sonic booms, the Air Force conducted an extensive literature review, conducted special tests, and developed a sonic boom model to assess the magnitude of impacts to the various environmental attributes. The sonic boom model developed from analysis of F-15 operations conducted at the Oceana MOA (W-72 off the coast of North Carolina) and air combat maneuvering instrumentation (ACMI) data from the Luke Range, indicates the average duration of a supersonic event was about 15 seconds. The number of supersonic events per sortie averaged 2.7, with 30% of these producing a sonic boom that hit the ground, or 0.8 booms per sortie. The Luke Range study showed the average carpet boom (the boom pattern produced by straight level flight) would impact about 51 square miles. The study also showed supersonic flight operations occur within an elliptical area of about 1865 square miles for the 1.0 cutoff ellipse. Statistical analysis of the Oceana and Luke Range data indicates the average carpet boom will range between two and four pounds overpressure per square foot (greater than 11 pounds per square foot is generally required to cause structural damage). The probability of a six pound per square foot boom occurring is about one in 1,000 booms. It is projected that an individual underneath the airspace would hear an average of less than one boom per day and would be very unlikely to hear three or more booms per day.

Maneuvering operations such as longitudinal accelerations, pushovers, and turns can cause focusing of the sonic wave at a fixed location. As indicated, these focus booms impact at a fixed location and do not follow the aircraft flight track. The pressure increase can vary from two to five times the overpressure level of the carpet boom at the location of the focus (Thery, 1972; Maglieri, Carlson, McLeod, 1971); however, atmospheric conditions reduce the possibility of such an increase from two to four times. Often atmospheric turbulence will cause a de-focusing effect that dissipates the boom completely

(Galloway, 1982). A most important point about focus booms is that the peak pressure decays much more rapidly than that of a carpet boom; thus, the positive impulse is much lower (contains less energy) than a carpet boom of the same overpressure. Galloway (1982) has provided generalized algorithms for evaluating the spatial effects of focus booms. Statistical analysis of this data shows the chance of any one location receiving a focus boom from linear acceleration and pushover maneuvers is one in about 3,300 chances, and for a turn maneuver the probability is one in 5,000 chances. The probability of a superfocus boom is one in about 16,700 chances. Daley (1982) has also investigated the spatial effect of a focus boom by using the National Oceanic and Atmospheric Administration's splash sonic boom model. The model showed that the focus boom zone exceeding nominal carpet boom levels was a band about 16 feet wide paralleling the curved flight track. At the point where the overpressure is twice the nominal carpet boom overpressure, the width reduces to about three feet. Applying this data to Sells would show the probability of a focus boom impacting any one spot (where the overpressure is equal to a nominal carpet boom) to be about one chance in 8500; for overpressures two times or more greater than nominal, the probability decreases to one in 42,500 chances. Thus, it can be seen that for higher magnification factors, the spatial effects and probability of the boom hitting any given location become extremely small.

There are three categories of concern in terms of sonic boom impacts to people: potential for hearing loss, annoyance, and non-auditory ill health. The long-term day-night C-weighted noise level currently associated with the maneuvering ellipse indicates a spatial effects average of 60 dB. This is expected to decrease to 59 dB by 1990. From an energy average standpoint, a focus boom or a superfocus boom adds less than 0.01 dB to these values and consequently is not significant in terms of day-night average noise levels. This data, along with the fact that tests conducted where the overpressures ranged between 50 to 144 psf did not show any permanent hearing loss, leads the Air Force to the conclusion that booms in the dB range anticipated at the Sells Airspace would not cause any hearing loss, either from routine operations or from a focus boom.

Annoyance factors suggested by CHABA (1982) indicate that about 10% of all residents beneath the airspace would be highly annoyed due to the cumulative noise levels of 62 dB DNL. Note, the cumulative level includes both the A and C-weighted noise values.

No definitive stance on physiological ill health can be taken at this time. There is little doubt that noise (including sonic booms) acts as a stressor, but it is not known with any degree of certainty whether prolonged exposure results in cumulative pathology. Some research has been conducted to try to determine a link between noise and ill health; however, many of these studies are questioned by the scientific community. CHABA (1981) was requested by OSHA and EPA to consider research that might be performed to examine the effects on human health from long-term noise exposure for industrial workers and the general population, respectively. CHABA's conclusion was that auditory effects were fairly well defined; however, in light of the data reviewed on nonauditory effects, it would be prudent to obtain more critical research. While these considerations are primarily for general audible and

industrial impact noises, it is stressed that specific data on sonic booms is also needed. EPA (1974) indicates that, due to the frequency range of sonic booms, they may not be as harmful as other, higher frequency impact sounds.

Researchers like Kryter (1980) and Broadbent (1980) indicate that if ill health can result from noise, the vehicle probably is a psychological stress factor. If this is the connection, and if one accepts the social surveys that predict annoyance as a factor of noise levels, then one would conclude that a very low percent if any of the exposed people beneath the Sells Airspace would develop nonauditory ill health conditions.

Public commenters to other environmental impact statements addressing supersonic flight urged the Air Force to provide a "worst-case" analysis of potential health impacts caused by sonic booms. However, specific predictions of such impacts are not possible. Additional years of research are needed to scientifically determine causal connections and to realistically predict generalized health effects based upon noise. Nevertheless, it has been suggested that there are links between noise and problems such as hypertension, cardiovascular changes, increased neurologic and gastrointestinal disturbances, changes in the course of pregnancy, and changes in hormone levels and other chemical balances. These effects are examples of conditions associated with stress. While such effects have been suggested, no method is available to predict either any specific reaction or the proportion of the community which could be affected. It is recognized that future research may provide a better understanding of the relationship between noise and nonauditory ill health; however, in the interim, decisions must be based on data presently supported by the scientific community. Although such potential effects cannot be dismissed, prevailing scientific opinion supports the expectation that the predicted levels of noise exposure in the Sells Airspace would not be sufficient to cause such effects.

Sonic boom effects on domestic animals and wildlife have been evaluated. Species of concern in the Sells Airspace are horses, cattle, goats, swine, and sheep. Review of available literature, information obtained on species' responses to sonic booms in other areas, and special studies conducted for coordination under the Endangered Species Act indicate supersonic flight in the Sells Airspace has not and will not significantly impact domestic animals or wildlife in the area.

Bighorn sheep on the Luke and Nellis AF Ranges have been exposed to sonic booms for a number of years. No noticeable effects in population age structure, longevity, or reproductive success have been found for the sheep on the Luke and Nellis AF Ranges (McQuivey, 1978).

Domestic animals such as cattle, horses, sheep and poultry show very little behavioral effects from exposure to sonic booms (Cottreau, 1972; Fletcher and Busnell, 1978; Hinshaw and others, 1970; Nixon and others, 1968; ICAO, 1970). Available literature and special studies reviewed support the fact that animals and wildlife can and do flourish in the presence of military aircraft operations, both subsonic and supersonic. Fletcher (1968) concludes if aircraft noise had an adverse impact, areas around large airports would be devoid of wildlife. This is also true for military operations areas, and it

should be noted that noise levels in MOAs are normally less than those at busy commercial airports and military airfields with jet activity.

The Air Force, in conjunction with the Texas Historical Preservation Commission and the Texas Bureau of Economic Geology, conducted tests to evaluate the significance of supersonic flight on archaeological sites within the Valentine MOA. The test did not indicate a significant impact would occur. Applying this data, along with data obtained in tests in Railroad Valley, Nevada, the Air Force concludes cultural resources in Sells MOA would not be significantly impacted.

Damage to structures should be limited and would primarily involve window breakage. At the anticipated overpressure levels, the probability of glass breakage is about two-tenths of one percent. NASA's review of structural responses indicates overpressure of less than about 11 pounds per square foot should not cause structural damage (Clarkson and Mayes, 1972). A 1977 evaluation on an adobe house in southern Arizona indicated the structure reacted similarly to conventional style structures. Therefore, other than window breakage, structural damage should be limited to the probability that one in 16,700 super booms could have an associated focus region where the focused portion would hit a structure. Due to the sparsity of structures in the area, the chance of a structure being hit by such a boom is limited.

The potential for sonic boom impact on the local economy has been evaluated and determined not to be significant. The evaluation included a review of population, employment, personal income, commercial activities, housing, tourism, ranching, farming, and mining. In no case did any of the area's economic attributes indicate sonic booms have resulted in a significant impact.

In conclusion, the Air Force does not foresee significant impacts from current or future supersonic activity to human health, the local economy, or the other topics investigated, such as endangered species. The local populace clearly perceives significant impacts to such factors as their quiet, rural lifestyle and their health. A number of people are anticipated to remain "highly annoyed" as operations continue.

4. Alternatives Considered:

- a. No action.
- b. Low Altitude Flying Training:
 - (1) Establishing flying routes at other bases.
 - (2) Rerouting existing military training routes.
 - (3) Raising minimum altitudes on military training routes.
 - (4) Discontinuing low level navigation flying.
 - (5) Developing additional routes.

c. Sells Airspace Supersonic Training:

- (1) Transferring supersonic training to other MOAs/ATCAAs.
- (2) Transferring supersonic training to other MOAs and restricted areas.
- (3) Raising supersonic training floors.
- (4) Discontinuing supersonic training.
- (5) Establishing a new training area for supersonic activity.

5. Accomplished, Continuing or Proposed Mitigation Measures: In the RDEIS, the Air Force listed five mitigation measures completed since the EIS process began and three mitigation measures to be considered. The Air Force was able to implement several measures, between the filing of the DEIS and RDEIS, which evolved from comments offered at the 1979 public hearings. As a result of comments made at the public hearing in 1986 and during the public comment period, additional mitigation measures have been developed for inclusion in the FEIS. After careful consideration and study of potential mitigation measures, the Air Force has categorized the potential mitigation measures as accomplished, continuing and proposed actions.

a. Accomplished Actions. Three of the five accomplished actions, as set forth in Section 6.4.1 of the RDEIS, now fall into the continuing actions category or have been broken out in several separate recommendations in order to be more responsive to particular comments received. The remaining two accomplished actions are: (1) not permitting flights below 3,000 feet above ground level unless on a military training route or in a low altitude tactical navigation area; (2) limiting supersonic flight activity to daylight hours.

b. Continuing Actions. Three of the five actions listed as accomplished in the RDEIS are in fact continuing actions. Use of flight simulators (one of the actions listed as proposed) was, in fact, already begun. Two additional continuing actions have been identified as a result of reviewing the DEIS, RDEIS, transcripts of public hearings, and comments. These actions were initiated in the 1979-1986 time frame but were not listed in the RDEIS as either accomplished or proposed. Six continuing actions follow: (1) reducing supersonic sorties through various coordinated efforts; (2) briefing all pilots of the flight restrictions; (3) using a public affairs program for cultural exchanges; (4) using flight simulators to enhance training without increasing flight activity; (5) monitoring of settlements in the area for population changes that could result in changes to no-fly areas; and (6) reviewing all training routes semiannually to ensure least impact on populated areas.

c. Proposed Actions. The RDEIS, at Section 6.4.2, proposed three actions to be implemented. One of these, use of flight simulators, has been recategorized to a continuing action in this FEIS. In this FEIS, there are two category of proposed actions as follows: (1) establishing a single point of contact for coordination with the Tohono O'odham and (2) limiting Luke AFB's training routes floor to 500 feet above ground level.

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1.0 PUBLIC COMMENTS

1.1 LETTERS



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION IX

215 Fremont Street
San Francisco, Ca. 94105

October 15, 1986

Captain Ed Taylor
HQ TAC/DEEV
Langley AFB, Virginia 23665-5001

Dear Captain Taylor:

The Environmental Protection Agency (EPA) has reviewed the revised Draft Environmental Impact Statement (DEIS) titled FLIGHT OPERATIONS IN THE SELLS AIRSPACE OVERLYING THE TOHONO O'ODHAM INDIAN RESERVATION AND ORGAN PIPE CACTUS NATIONAL MONUMENT, SOUTHERN ARIZONA. We have the enclosed comments regarding this DEIS.

We have classified this DEIS as Category EC-2, Environmental Concerns - Insufficient Information (see attached "Summary of Rating Definitions and Follow-Up Action"). This DEIS is rated EC-2 because of several concerns. One concern is that the DEIS minimizes the non-auditory health impacts associated with overflights. We believe this is a result of both miscalculations and differing interpretations of potential impacts (see comments #1, 2, 3, 5, 6, 8). Another concern is that the exposed population was not included in a number of impact analyses (see comments #2, 3, 4, 6, 7, 8). Finally, because of potential noise impacts, EPA believes the Final Environmental Impact Statement (FEIS) should evaluate possible mitigation measures, including modification of the proposed flight track for supersonic operations (see comment #8). A summary and the date of EPA's comments will be published in the Federal Register pursuant to our public disclosure responsibilities under Section 309 of the Clean Air Act.

We appreciate the opportunity to review this DEIS. Please send 3 copies of the FEIS to this office at the same time it is officially filed with our Washington, D.C. office. If you have any questions, please contact David Powers, Federal Activities Branch, at (415) 974-8187 or FTS 454-8187.

Sincerely yours,

Charles W. Murray, Jr.
Assistant Regional Administrator
for Policy and Management

Enclosure (6 pages)

Noise Comments (Review Performed by EPA Headquarters):

1. p. 2-17 to 2-19 - Subsonic Noise Impact

4 → Although the Sell Airspace CY1985 data (Table 2.6-1) indicate no risk of hearing damage from training activities conducted in military training routes, the "worst case" analysis (100% of sorties passing over the same ground point) indicates day-night average sound level (DNL) values of 61 decibels (dB) at 3 locations, enough to cause annoyance in about 25% of the population. If the assumption of 25% of sorties passing over one point is correct, then the DNL's would match the EPA Noise Levels Document goals (i.e., no DNL in excess of 55dB).

2. p. 2-20 to 2-32: Supersonic Noise Impacts

→ The discussion seems relatively comprehensive. However, data on the number of persons exposed to booms in the carpet-boom areas should be incorporated in this analysis.

Table 2.6-5 should list the probability of hearing one or more booms (26.4% for ellipse average and 45.9% for ellipse center).

We agree that the probability of focused booms or superbooms is minimal.

5 → A table should be added showing the C-weighted DNL (CDNL) values associated with the various boom probabilities. For example, the mean boom overpressure is 2.81 psf (from Table 2.6-2). The CDNL contribution of this overpressure is 71 dB. According to a formulation by Kryter in the Levels Document, the DNL contribution is 62 dB. The difference is probably due to Kryter's use of A-weighting. If the ellipse average probability of hearing at least one boom is 26.4%, then the average CDNL value for the entire ellipse is 6 dB less, or about 65 dB. This is enough to cause annoyance to a significant percentage (about 30%) of the exposed population. Therefore, it is pertinent to include the size of the exposed population and to discuss the complaint situation in reaction to the exposure.

3. p. 4-2 to 4-3 Subsonic Noise Impact

→ Data on the exposed population is not incorporated in this analysis.

6 → The increase of 6 dB in DNL is significant and the number of 9% highly annoyed is an understatement. According to data in the Levels Document, about 23% of exposed persons are highly annoyed at DNL equal to 61 dB.

4. p. 4-4 to 4-9 Supersonic Noise Impacts

7 The probability of sonic boom occurrence at a given location is slightly lower than at present. This is consistent with the slight decrease in supersonic flights projected. Therefore, the comments under item 2 above are relevant here. In particular, the exposed population is pertinent; if there is a significant increase in population in the areas in question, there will be a corresponding increase in noise impacts.

5. Section 4.3.4 (p. 4-9 to 4-12) Sonic Boom Impacts on People

8 The observation that a "high degree of behavioral habituation is normally seen in humans when the exposure is repeated" (as paraphrased from EPA's Levels Document) may mean that the "startle response" diminishes. However, most available information indicates that annoyance experienced upon exposure to externally controlled noise (i.e., noise that the listener has no control over) continues unabated. Consequently, "habituation" should not be relied upon as a mitigating factor.

In Figure 4.3-1 the projected CDNL's shown seem low (see Comment #2). Since there is a conflict between the two numbers, we request more detail on how the numbers were arrived at. For comparison, we present here the method of calculating our projected levels.

8 From Table 4.3-2, the average probability of hearing one or more booms is 23.5%. From Table 2.6-3, the mean boom overpressure is 2.81 psf. The corresponding sound level (C-weighted) is 133.6 dB (peak, not rms). If the overpressure pulse has a duration of 0.1 second (assumed triangular pulse) the sound exposure level (SEL) is 120.6 dB. SEL contribution to a 24-hour CDNL is 49.4 dB less or 71.2 dB. Subtracting 6.2 dB for a 23.5% probability yields a statistical CDNL of 65 dB.

With respect to Figure 4.3-2, two items need to be resolved:

(1) The curve for % "highly annoyed" versus A-weighted DNL is inconsistent with the similar curve in the Levels Document (which is referenced extensively in the EIS). For example, Fig. D-13 of the Levels Document shows about 23% highly annoyed at DNL equal to 60 dB to about 52% highly annoyed at DNL equal to 75 dB. In contrast, Fig. 4.3-2 in the DEIS shows roughly 6% highly annoyed at DNL equal to 60 dB to about 35% highly annoyed at DNL equal to 75 dB (A-weighted). The corresponding values shown for CDNL are about 12% at CDNL equal to 60 dB to about 54% at CDNL equal to 75 dB.

(2) It seems likely that the curves in Fig. 4.3-2 are mislabeled. If the upper curve (labeled C-impulsive) and the lower curve (labeled A-General) were interchanged, the A-General curve would be much closer to Fig. D-13 of the Levels Document, although still too low in "% annoyed" at the lower levels. Furthermore, one would expect the C-weighted curve to show lower annoyance at any given level. For almost any given sound spectrum (with an assumed statistical probability of annoyance) the C-weighted level is higher than the A-weighted level. Conversely the annoyance probability would be higher for an A-weighted level than for the C-weighted level of a given spectrum.

6. Section 4.3.5 Cumulative Effect of Subsonic and Supersonic Noise

As delineated below, there seems to be two problem areas:

(1) Data on the number of persons residing (or otherwise present) in the area under consideration are not incorporated into this analysis. Thus, there is no basis for judging the actual total impact (i.e., average fractional impact multiplied by number of persons exposed).

(2) The entire tenor of the discussion (much as in Johnson's reply to Worthington, Appendix B-4) tends to discount the concerns relative to non-auditory adverse health effects. EPA's view is that there is sufficient experimental and survey evidence of such effects to warrant concern. It should be noted that EPA is concerned not simply about health as an absence of illness, but about "health and welfare", defined as "complete physical, mental and social well-being and not merely the absence of disease or infirmity."

Finally, from the discussion in comment #2 (with respect to Fig. 4.3-2), it is clear that we disagree with the assertions that the cumulative DNL of 68 dB for the "worst case" or of 62 dB for the 25% overflight case result in 20% and 10% , respectively, of the exposed population as highly annoyed. For those DNL values, our estimate (from the Levels Document) would be about 38% and 23%, respectively, of the exposed population as highly annoyed. This is approximately twice the (fractional) impact estimated in the DEIS.

7. Section 4.3.7 Sonic Boom Effects on Structures

With respect to the possibility of structural damage we concur that it is probably minimal. However, a more detailed analysis is needed with regard to window breakage. The data on page

4-18 indicate that, for a 3 psf boom, the probability of window breakage is 0.0003. From Table 4.3-2, the probability of "hearing" one or more booms is 23.5%; thus, the typical location in the boom ellipse will experience 90 booms per year (median overpressure 2.81 psf, from Table 2.6-2). Therefore, for any one window, the probability of breakage is about 2.7% per year.

10 It is accordingly pertinent to establish how many windows are exposed. If there were 1,000 homes with 20 windows apiece, the foregoing estimates would imply 270 broken window per year. While this does not indicate a serious problem, neither does it warrant a casual dismissal. Again, it is relevant to view the problem with reference to the size of the exposed population and the number and type of residences involved.

8. p. 6-1 - Probable Environmental Noise Effects

11 We disagree that the link between noise and non-auditory physiological effects should be discounted. This sentiment does not reflect the information presented in EPA documents and studies, nor does it reflect a large body of scientific opinion.

From the data reviewed earlier, we project a "typical" CDNL of about 65 dB for the exposed areas subjected to less than one boom per day. For the maneuvering areas, containing about 900 people who would be exposed to 7 booms per day, the CDNL would be a much higher estimate. The data on the exposed population should be introduced in the earlier discussions on noise impacts, as pointed out above. Since our estimate of Ldn 65 for the "typical" exposed person is based on 1/4 boom per day, the CDNL for 7 booms per day would be 14.5 dB higher, or almost 80 dB. It is important to clear up the discrepancy between this estimate and the Air Force estimate of 59 dB for the area of highest exposure. If our estimate is correct, the Air Force should strongly consider modifying the proposed flight track for supersonic operations to avoid such high exposures. Aside from the quantitative correctness of the figures involved, exposing 900 persons to 7 sonic booms per day should be avoided.

The DEIS does not discuss the combined DNL effect of subsonic noise plus sonic boom. Since the Kryter formulation (from the the Levels Document) projects an A-weighted DNL from sonic boom which is 8 dB lower than the calculated CDNL, it would not be unreasonable to subtract 8 dB from the sonic-boom CDNL to obtain an equivalent DNL, and (logarithmically) add this value to the subsonic noise DNL to obtain an effective overall DNL

for flight operations. This resultant DNL would be the appropriate value to use in projecting the noise impact on the exposed population.

Based on this approach, the resultant DNL for the most highly impacted areas (i.e., 61 dB for subsonic noise and (80-8) or 72 dB for sonic booms) would be controlled by the sonic boom level of 72 dB. For the "typical" areas (estimated 55 dB for subsonic noise and (65-8) or 57 dB for sonic boom), the resultant DNL would be 59 dB, with both sources contributing significantly to the DNL. Since the fractional impact for a DNL of 59 dB is about 0.2, the overall impact for the 9500 persons in the affected area would be the equivalent of 1900 persons "fully impacted" by noise.

The FEIS should recognize this impact and discuss it in light of military training needs and the potential cost of possible mitigation measures.



U.S. Department
of Transportation
**Federal Aviation
Administration**

800 Independence Ave., S.W.
Washington, D.C. 20591

AUG 14 1986

Captain Edward Taylor
Department of the Air Force
HQ TAC-DEEV
Langley AFB, Virginia 23665-5001

Dear Captain Taylor:

We appreciate the opportunity to review the revised Draft Environmental Impact Statement (DEIS), concerning flight operations in Sells Airspace.

The proposed supersonic flight operations in the Sells Military Operations Area will not affect the existing Federal Aviation Administration (FAA) facilities in our Western-Pacific Region. However, there is a proposal to relocate the Mt. Humboldt (Phoenix) Air Route Surveillance Radar (ARSR) to Ajo, Arizona about 1990. This will be a joint-use, FAA/USAF radar facility.

Hope this information is helpful.

Sincerely,

Norman H. Plummer
Director of Environment and Energy

1-9



50 Years of Air Traffic Control Excellence
- A Standard for the World -

BLANK



UNITED STATES
DEPARTMENT OF THE INTERIOR

OFFICE OF THE SECRETARY

PACIFIC-SOUTHWEST REGION

BOX 36098 • 450 GOLDEN GATE AVENUE

SAN FRANCISCO, CALIFORNIA 94102

(415) 556-8200

August 11, 1986

ER86/758

Captain Ed Taylor
HQ TAC/DEEV
Langley AFB, VA 23665-5001

Dear Captain Taylor:

The Department of the Interior has reviewed the Draft Environmental Impact Statement (DEIS) for Flight Operations in the Sells Airspace Overlying the Tohono O'odham Indian Reservation and Organ Pipe Cactus National Monument, Southern Arizona and has the following comments for your consideration.

Endangered Species

12 → There are two newly listed species for inclusion in the endangered species information. The Tumamoc globeberry (Tamoc macdougalii), a perennial vine listed as endangered on April 29, 1986, is found at several locations on the Tohono O'odham Indian Reservation. On March 31, 1986, the desert pupfish (Cyprinodon macularius) was also listed as endangered, and critical habitat was designated for Quitobaquito Spring on Organ Pipe Cactus National Monument, where the Arizona population of desert pupfish is located.

→ The Thornber's fishhook cactus (Mammillaria thornberi), currently proposed for listing as threatened, should be included as it is also found on both the monument and the reservation.

Indian Affairs

The environmental impacts are a result of the aircraft flying greater than the speed of sound, and flying low level at subsonic speeds. The impacts are air pollution, low level jet noise and sonic booms. The primary impact of concern for local residents is the effect of low level training flights and sonic booms on people, domestic animals, wildlife, archaeological sites and structures. The areas of concern regarding sonic boom impact to people include the potential for hearing loss, annoyance and non-auditory health impacts.

13 → It is recommended that the following items be discussed with the Tohono O'odham Nation:

1. Establishing fly routes by other bases
2. Re-routing existing military training routes
3. Raising minimum altitude on military training routes
4. Discontinuing low-level navigation flying
5. Developing additional routes
6. Transferring supersonic training to other MOA's ATCCA's and/or restricted areas
7. Raising supersonic training floors
8. Discontinuing supersonic training
9. Establishing a new training area for supersonic activity

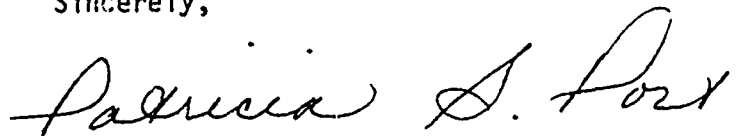
14 → The Tohono O'odham Indian Tribe has declined to comment on the DEIS at this time. The Tohono O'odham Nation will reserve its comments until the public hearings are held. It is recommended that the U.S. Air Force consider establishing a public affairs program to maintain open communications between itself and the tribe regarding flight operations in the Sells Airspace. It appears that the Tohono O'odham Nation is not aware that the U.S. Air Force accepts claims for damage caused by sonic booms and reimburses the claimant for repairs and/or the replacement of the damaged item.

Organ Pipe Cactus National Monument

15 → The National Park Service (NPS) opposes the inclusion of the Organ Pipe Cactus National Monument in the Sells MOA. While the NPS continues to oppose the overflights of the Monument, they suggest scheduled, periodic contacts between a U.S. Air Force single point contact and the Superintendent of the Monument. The NPS would also like to see established flight routes and altitude levels.

Thank you for the opportunity to review and comment on this document.

Sincerely,



Patricia Sanderson Port
Regional Environmental Officer

ccs: Director, OEPR (w/orig. incoming)
Reg. Dir., NPS
Area Dir., BIA
Reg. Dir., FWS



UNITED STATES
DEPARTMENT OF THE INTERIOR
FISH AND WILDLIFE SERVICE

Ecological Services
2934 W. Fairmount
Phoenix, AZ 85017

June 24, 1986

Captain Ed Taylor
HQ TAC/DEEV
Langley AFB, VA 23665-5001

Dear Captain Taylor:

We have reviewed the revised draft Environmental Impact Statement for Flight Operations in the Sells Airspace over the Tohono O'odham Indian Reservation and Organ Pipe Cactus National Monument and find that the document generally addresses our concerns. We would like to provide you with the following additional endangered species information for inclusion in the final document.

16 There are two additional listed species found under the Sells Airspace. The desert pupfish (Cyprinodon macularius) was listed as endangered on March 31, 1986. Critical habitat was designated for Quitobaquito Spring on Organ Pipe Cactus National Monument, the location of an Arizona population. The Tumamoc globeberry (Tumamoca macdougalii), a perennial vine listed as endangered on April 29, 1986, has been found in several locations on the Tohono O'odham Reservation.

One plant currently proposed for listing as threatened, Thornber's fishhook cactus (Mammillaria thornberi) is also found on both the reservation and the monument and should be mentioned.

Thank you for the opportunity to review this draft EIS. If we can be of further assistance, please contact this office at (602) 241-2493 or FTS 261-2493.

Sincerely,

Lesley Fitzpatrick

Lesley Fitzpatrick
Acting Field Supervisor

cc: Director, Arizona Game & Fish Department
Regional Director, FWS, Albuquerque, NM (AHR)



United States Department of the Interior

NATIONAL PARK SERVICE ORGAN PIPE CACTUS NATIONAL MONUMENT

IN REPLY REFER TO:

ROUTE 1, BOX 100
AJO, ARIZONA 85321

L34

October 28, 1986

Captain Joe Gradney
Environmental Planning Division
Headquarters Tactical Air Command
Langley AFB, VA 23665-5001

Dear Captain Gradney:

We have received a copy of the Revised Draft, Environmental Impact Statement and your letter of October 10, 1986 announcing the public hearing to receive oral and written comments on that document.

17 → While we recognize and appreciate efforts by the Department of the Air Force to minimize impacts on Organ Pipe Cactus National Monument, the National Park Service has opposed and continues to oppose inclusion of the Monument in the Sells airspace.

Thank you for the opportunity to enter this into the permanent record concerning this action.

Sincerely yours,

Harold J. Smith
Superintendent

HJS:B

12 NOV 1986

Mr. Francisco Jose
Vice Chairman,
Tohono O'odham Nation
P.O. Box 837
Sells, Arizona 85634

Dear Mr. Jose,

I appreciate the opportunity of helping to conduct the public hearing at the Santa Rosa Boarding School for the draft Environmental Impact Statement. I understand your concerns for and desire to have adequate time to prepare and submit written comments. As you know, the original deadline was 15 November 1986.

Based upon your request at the public hearing, I have obtained the concurrence of Headquarters Tactical Air Command to extend the comment period from 15 November 1986 to 1 December 1986. This should allow you enough time to prepare the written record for whatever meetings you might hold on the reservation.

Any written comments you wish to submit will be considered if they are post-marked no later than 1 December 1986. Any material post-marked after that date, unfortunately, cannot be considered. I hope you will be able to meet the new extended deadline.

I appreciate your invitation to Lt Colonel Paul Schildgen to attend your meeting in Sells on 14 November 1986. Lt Colonel Schildgen will be available to you to explain technical issues and/or procedures. Any explanation of policy, of course, will have to await the formal response period of the draft EIS.

Again, thank you and Mr. Robles for your hospitality on Saturday, 25 October 1986.

Sincerely,



DAVID L. PEEBLES, Colonel, USAF
Commander

36 F-3B

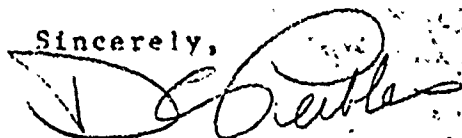
12 November 1986

Mr. John Harris
Papago Legal Services, Incorporated
P.O. Box 246
Sells, Arizona 85634

Dear Mr. Harris,

Ms. Jody Roberson of the Davis Monthan Law Center informed me of your request for a copy of the 1979 draft Environmental Impact Statement. Enclosed please find that copy.

Sincerely,



DAVID L. PEERLES, Colonel, USAF
Commander

1 Atch
Environmental Impact
Analysis Process

Ja copy

12 November 1986

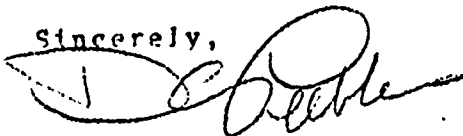
Mr. Dabney R. Altaffer
177 N. Church, Suite 700
Tucson, Arizona 85701-1119

Dear Mr. Altaffer,

Thank you for your letter of November 6, 1986. I was pleased to be able to notify Mr. Jose of the extension for submitting written comments to the revised draft Environmental Impact Statement.

In accordance with your request, enclosed please find the 1979 draft Environmental Statement.

Sincerely,



DAVID L. PEEBLES, Colonel, USAF
Commander

1 Arch
Environmental Impact
Analysis Process



Arizona

Department of Commerce

Rita N. Carrillo · Director

Bruce Babbitt · Governor

MEMORANDUM

TO : U.S. Air Force

FROM: Arizona State Clearinghouse

DATE: August 08, 1986

RE : DRAFT (Revised) Environmental Impact Statement
for Flight Operations in the Sells Airspace
Overlying the Tohono O'Odham Indian Reservation
and Organ Pipe Cactus National Mountain in Southern
Arizona

SAI NO: AZ 86-80-0025

This memorandum is in response to the above project submitted to the Arizona State Clearinghouse for review.

The project has been reviewed pursuant to the Executive Order 12372 by certain Arizona State officials and Regional Councils of Government.

The Standard Form 424 is attached along with any comments that were received for submission with the project. The comments are advisory.

Attachments

cc: Arizona State Clearinghouse
Applicant

FEDERAL ASSISTANCE		2. APPLICANT'S APPLICATION IDENTIFIER	3. NUMBER	4. STATE APPLICATION IDENTIFIER	5. NUMBER 86 800025
1. TYPE OF SUBMISSION (Mark appropriate box) <input type="checkbox"/> NOTICE OF INTENT (OPTIONAL) <input type="checkbox"/> PREAPPLICATION <input type="checkbox"/> APPLICATION		6. DATE Year month day 19	7. DATE ASSIGNED BY STATE Year month day JUN 11 1988		
Leave Blank		AUG 08 1988			
4. LEGAL APPLICANT/RECIPIENT a. Applicant Name: U.S. Air Force b. Organization Unit: HQ TAC/DEEV c. Street/P.O. Box: Langley AFB d. City: VA e. County: 23665 f. State: g. ZIP Code: h. Contact Person (Name & Telephone No.): Capt Edwin Taylor (804) 764-4430			5. EMPLOYER IDENTIFICATION NUMBER (EIN) 6. PROGRAM (From CFDA) a. NUMBER: 121999 b. TITLE: DEPT OF DEFENSE		
7. TITLE OF APPLICANT'S PROJECT (Use section IV of this form to provide a summary description of the project) DRAFT (REVISED) EIS FOR FLIGHT OPERATIONS IN THE SELLS AIRSPACE OVERLYING THE TOHONO O'ODHAM INDIAN RESERVATION & ORGAN PIPE CACTUS NATIONAL MT IN S. AZ.--THIS EIS EVALUATES THE IMPACTS OF SUPERSONIC FLIGHT OPERATIONS IN THE SELLS MILITARY OPERATIONS AREA/AIR TRAFFIC CONTROL AA AS PART OF THE REVIEW OF THE EXISTING SUPERSONIC WAIVER (OVER)			8. TYPE OF APPLICANT/RECIPIENT a. <input type="checkbox"/> Individual b. <input type="checkbox"/> Business c. <input type="checkbox"/> Government d. <input type="checkbox"/> Other e. <input type="checkbox"/> Other (Specify) f. <input type="checkbox"/> Other (Specify) g. <input type="checkbox"/> Other (Specify) h. <input type="checkbox"/> Other (Specify) i. <input type="checkbox"/> Other (Specify) j. <input type="checkbox"/> Other (Specify) k. <input type="checkbox"/> Other (Specify) l. <input type="checkbox"/> Other (Specify) m. <input type="checkbox"/> Other (Specify) n. <input type="checkbox"/> Other (Specify) o. <input type="checkbox"/> Other (Specify) p. <input type="checkbox"/> Other (Specify) q. <input type="checkbox"/> Other (Specify) r. <input type="checkbox"/> Other (Specify) s. <input type="checkbox"/> Other (Specify) t. <input type="checkbox"/> Other (Specify) u. <input type="checkbox"/> Other (Specify) v. <input type="checkbox"/> Other (Specify) w. <input type="checkbox"/> Other (Specify) x. <input type="checkbox"/> Other (Specify) y. <input type="checkbox"/> Other (Specify) z. <input type="checkbox"/> Other (Specify)		
9. AREA OF PROJECT IMPACT (Names of cities, counties, states, etc.) Southern Arizona		10. ESTIMATED NUMBER OF PERSONS BENEFITING		11. TYPE OF ASSISTANCE a. <input type="checkbox"/> Direct Grant b. <input type="checkbox"/> Indirect Grant c. <input type="checkbox"/> Other d. <input type="checkbox"/> Other (Specify)	
12. PROPOSED FUNDING a. FEDERAL \$.00 b. APPLICANT .00 c. STATE .00 d. LOCAL .00 e. OTHER .00 f. Total \$.00		13. CONGRESSIONAL DISTRICTS OF: a. APPLICANT b. PROJECT 14. TYPE OF APPLICATION a. <input type="checkbox"/> New b. <input type="checkbox"/> Renewal c. <input type="checkbox"/> Extension d. <input type="checkbox"/> Other (Specify) 15. TYPE OF CHANGE (For 14a or 14b) a. <input type="checkbox"/> Increase Dollars b. <input type="checkbox"/> Decrease Dollars c. <input type="checkbox"/> Increase Duration d. <input type="checkbox"/> Decrease Duration e. <input type="checkbox"/> Other (Specify) 16. DATE DUE TO FEDERAL AGENCY Year month day		17. TYPE OF APPLICATION a. <input type="checkbox"/> New b. <input type="checkbox"/> Renewal c. <input type="checkbox"/> Extension d. <input type="checkbox"/> Other (Specify) 18. TYPE OF CHANGE (For 14a or 14b) a. <input type="checkbox"/> Increase Dollars b. <input type="checkbox"/> Decrease Dollars c. <input type="checkbox"/> Increase Duration d. <input type="checkbox"/> Decrease Duration e. <input type="checkbox"/> Other (Specify) 19. DATE DUE TO FEDERAL AGENCY Year month day	
18. FEDERAL AGENCY TO RECEIVE REQUEST a. ORGANIZATIONAL UNIT (IF APPROPRIATE) b. ADMINISTRATIVE CONTACT (IF KNOWN) c. ADDRESS same as above			20. EXISTING FEDERAL GRANT IDENTIFICATION NUMBER 21. REMARKS ADDED <input type="checkbox"/> Yes <input type="checkbox"/> No		
22. THE APPLICANT CERTIFIES THAT: To the best of my knowledge and belief, data in this preapplication/application are true and correct, the document has been duly authorized by the governing body of the applicant and the applicant will comply with the attached assurances if the assistance is approved.		23. THIS NOTICE OF INTENT/PREAPPLICATION/APPLICATION WAS MADE AVAILABLE TO THE STATE EXECUTIVE ORDER 12372 PROCESS FOR REVIEW ON: DATE a. YES, PROGRAM IS NOT COVERED BY E.O. 12372 <input type="checkbox"/> b. NO, PROGRAM HAS NOT BEEN SELECTED BY STATE FOR REVIEW <input type="checkbox"/>			
23. CERTIFYING REPRESENTATIVE a. TYPED NAME AND TITLE b. SIGNATURE		24. APPLICATION RECEIVED 19			
25. FEDERAL APPLICATION IDENTIFICATION NUMBER		26. FEDERAL GRANT IDENTIFICATION			
27. ACTION TAKEN <input type="checkbox"/> a. AWARDED <input type="checkbox"/> b. REJECTED <input type="checkbox"/> c. RETURNED FOR AMENDMENT <input type="checkbox"/> d. RETURNED FOR E.O. 12372 SUBMISSION BY APPLICANT TO STATE <input type="checkbox"/> e. DEFERRED <input type="checkbox"/> f. WITHDRAWN		28. FUNDING a. FEDERAL \$.00 b. APPLICANT .00 c. STATE .00 d. LOCAL .00 e. OTHER .00 f. TOTAL \$.00		29. ACTION DATE Year month day 30. CONTACT FOR ADDITIONAL INFORMATION (Name and telephone number) 31. STARTING DATE Year month day 32. ENDING DATE Year month day 33. REMARKS ADDED <input type="checkbox"/> Yes <input type="checkbox"/> No	

TO:

State Application Identifier (SAI)

JUN 19 1986

86 800025

State AZ No.

MFC
Arizona State Parks Board
1688 W. Adams, Rm. 109
Phoenix, AZ 85007

Indian Affairs
Game & Fish
Transportation
Environmental Studies
Center for Public Affairs
Health
Parks
Region I, II

FROM: Arizona State Clearinghouse
1700 West Washington Street, Room 505
Phoenix, Arizona 85007

This project is referred to you for review and comment. Please evaluate as to the following questions. After completion, return THIS FORM AND ONE XEROX COPY to the Clearinghouse no later than 17 WORKING DAYS from the date noted above. Please contact the Clearinghouse at 255-5004 if you need further information or additional time for review.

☐ No comment on this project ☐ Proposal is supported as written ☒ Comments as indicated below

1. Is project consistent with your agency goals and objectives? ☐ Yes ☐ No ☐ Not Relative to this agency
2. Does project contribute to statewide and/or areawide goals and objectives of which you are familiar? ☐ Yes ☐ No
3. Is there overlap or duplication with other state agency or local responsibilities and/or goals and objectives? ☐ Yes ☐ No
4. Will project have an adverse effect on existing programs with your agency or within project impact area? ☐ Yes ☐ No
5. Does project violate any rules or regulations of your agency? ☐ Yes ☐ No
6. Does project adequately address the intended effects on target population? ☐ Yes ☐ No
7. Is project in accord with existing applicable laws, rules or regulations with which you are familiar? ☐ Yes ☐ No

18 ☐ Additional Comments (Use back of sheet, if necessary): *Re: sections 2.6.7.1 - The State Historic Preservation Office should also be consulted in a resource analysis.*

Reviewers Signature

Shereen Berner

1-20

Date

6-19-86

Title

Deputy S.H.P.O., Archaeology - Compliance

Telephone

255-4174

TO:

0701

7-4-86

State Application Identifier (SAI)

JUN 11 1986

State AZ No.

86 800025

John J. DeBolske, Exec. Dir.
Maricopa Association of
Government
1820 W. Washington St.
Phoenix, AZ 85007

Indian Affairs
Game & Fish
Transportation
Environmental Studies
Center for Public Affairs
Health
Parks
Region I, II

FROM: Arizona State Clearinghouse
1700 West Washington Street, Room 505
Phoenix, Arizona 85007

This project is referred to you for review and comment. Please evaluate as to the following questions. After completion, return THIS FORM AND ONE XEROX COPY to the Clearinghouse no later than 17 WORKING DAYS from the date noted above. Please contact the Clearinghouse at 255-5004 if you need further information or additional time for review.

☒ No comment on this project ☐ Proposal is supported as written ☐ Comments as indicated below

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6. Does project adequately address the intended effects on target population? ☐ Yes ☐ No
7. Is project in accord with existing applicable laws, rules or regulations with which you are familiar? ☐ Yes ☐ No

Additional Comments (Use back of sheet, if necessary):

Reviewers Signature

John DeBolske

1-21

Date

7/11/86

Title

Telephone



MARICOPA ASSOCIATION OF GOVERNMENTS

1820 WEST WASHINGTON PHOENIX, ARIZONA 85007 (602) 254-6308

TO: Mr. Harry Wolfe, MAG Aviation Coordinator

FROM: Clearinghouse Contact: Kathleen Bartee

SUBJECT: PROJECT NOTIFICATION AND REVIEW

Applicant: U.S. Air Force

Project Title: Draft (Revised) EIS

State Application Identifier: 86-80-0025

MAG Log Number: 0701

Date Due: July 4, 1986

A copy of an A-95 application form AZ-189 along with supporting project documentation is attached for your review and comment in accordance with requirements of OMB Circular A-95. Please review the proposal as it affects the plans and programs of your agency and register your response below. Please return ONLY THIS completed form by the date noted above.

- ☒ No comment on the above project ☐ Proposal is supported as written ☐ Comments as indicated below
1. Is project consistent with your agency goals and objectives? ☐ Yes ☐ No ☐ Not Relative to this agency
 2. Does project contribute to statewide and/or areawide goals and objectives of which you are familiar? ☐ Yes ☐ No
 3. Is there overlap or duplication with other state agency or local responsibilities and/or goals and objectives? ☐ Yes ☐ No
 4. Will project have an adverse affect on existing programs with your agency or within project impact area ☐ Yes ☐ No
 5. Does project violate any rules or regulations of your agency? ☐ Yes ☐ No
 6. Does project adequately address the intended efforts on target population? ☐ Yes ☐ No
 7. Is project in accord with existing applicable laws rules or regulations with which your are familiar? ☐ Yes ☐ No

Additional Comments (Use back of sheet, if necessary)

Reviewers Signature

Harry P. Wolfe

Date

7/3/86

BRUCE BABBITT, Governor

Commissioners:
CURTIS A. JENNINGS, Scottsdale, Chairman
W. LINN MONTGOMERY, Flagstaff
FRED S. BAKER, Elgin
LARRY D. ADAMS, Bullhead City
FRANCES W. WERNER, Tucson

Director
BUD BRISTOW

Assistant Director, Services
ROGER J. GRUENEWALD

Assistant Director, Operations
DUANE L. SHROUFE



ARIZONA GAME & FISH DEPARTMENT

2222 West Greenway Road Phoenix, Arizona 85023 942-3000

July 21, 1986

Captain Ed Taylor
Environmental Planning Division
HQ TAC/DEEV
Langley AFB, Virginia 23665-5001

Re: Revised Draft EIS
Sells MOA

Dear Captain Taylor:

The Arizona Game and Fish Department has reviewed the Revised Draft Environmental Impact Statement for flight operations in the Sells Airspace over the Tohono O'Odham Indian Reservation and Organ Pipe Cactus National Monument, and we have the following comments.

19 Overall, the document is thorough and adequately addresses our earlier concerns relative to sonic boom impacts to wildlife species. However, we are concerned that comprehensive protection measures are not outlined for endangered species. Specifically, we recommend designated low-level flight avoidance areas where Sonoran pronghorn antelope are known to occur. We also consider it a worthwhile effort to document any peregrine falcon aeries in the area and, once located, designate low-level flight avoidance zones in the vicinity of any aerie.

20 The possibility of aircraft crashing is also mentioned in the DEIS, but there are no provisions to reseed, or otherwise restore terrestrial habitats where aircraft crashes occur. We highly recommend attaching a restoration plan to the document, which will address the issue of rehabilitating disturbed habitats, in the event of a crash. Salient points which should be included in such a plan are:

- Revegetating with the seeding and planting of native vegetation, including trees, shrubs, and cacti in the following areas:
 - a. the crash site and any adjacent lands damaged by crash-associated fires.

↑ b. all off-road tracks created by vehicles driven to the
site to retrieve the wreckage.

→ - Revegetation should utilize native plants indigenous to
the site.

We compliment the efforts of the U.S. Air Force to
address the numerous environmental issues in a
comprehensive manner.

Thank you for the opportunity to review this
document.

Sincerely,

Bud Bristow, Director


Robert K. Weaver

Habitat Evaluation Coordinator
Planning and Evaluation Branch

RKW:TS/11r

cc: T.W. Spalding, Supervisor, Tucson Regional Office
State Clearinghouse, No. AZ 86-80-0025



ARIZONA STATE PARKS

1688 WEST ADAMS STREET
PHOENIX, ARIZONA 85007
TELEPHONE 602-255-4174

BRUCE BABBITT
GOVERNOR

STATE PARKS BOARD MEMBERS

REESE G. WOODLING
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TUCSON

ROBERT K. LANE
STATE LAND COMMISSIONER

DON CHARPIO, Ed.D.
EXECUTIVE DIRECTOR

ROLAND H. SHARER
DEPUTY DIRECTOR

July 21, 1986

Capt. Ed Taylor
Environmental Planning Division
Headquarters Tactical Air Command
Langley AFB, VA 23665-5001

RE: Sells Airspace, Draft EIS, Tohono O'dham Indian
Reservation and Organ Pipe Cactus National Monument,
DOD-USAF

Dear Capt. Taylor:

I have reviewed the draft environmental impact statement
on the Sells military operations area and air traffic control
assigned airspace for southeastern Arizona. Pursuant to 36
CFR Part 800, it appears that adequate consideration has
been given to the potential impact of such activities to
cultural resources.

We appreciate the opportunity to comment. If you have any
questions, please contact me.

Sincerely,

Shereen Lerner, Ph.D.
Deputy SHPO, Archaeology and Compliance

for Donna J. Schober
State Historic Preservation Officer



File 23 Sells: Mur & IS

TOHONO O'ODHAM NATION

P. O. Box 837

Telephone (602) 388-3321

Sells, Arizona 85634

July 11, 1986

Mr. Arley W. McRae, Colonel, USAF
832D Combat Support Group (TAC)
Luke Air Force Base, AZ 85309

Re: Response of Tohono O'odham Nation to your request for formal public hearing on revised draft Sells Airspace Environmental Impact Statement; Necessity for extension of comment deadline

Dear Colonel McRae:

The Tohono O'odham Nation is in receipt of your letter dated June 06, 1986 wherein you:

1. Notified the Tohono O'odham Nation that a revised draft Sells Airspace Environmental Impact Statement has been filed with the Environmental Protection Agency; and
2. Request the cooperation of the Tohono O'odham Nation in scheduling and organizing a formal public hearing on this matter.

The goals of the Tohono O'odham Nation is to provide an opportunity for as many concerned members of the Nation as possible, as well as other concerned individuals residing on the reservation and/or acquainted with the problem, to give their input on this matter. Any public hearing conducted on this matter with the approval of the Tohono O'odham Nation will need to be organized with this goal in mind.

The very earliest that such a hearing could be held on this matter would be in late September or early October, 1986. There are two primary reasons for this, Colonel McRae:

1. A large number of claims filed with Davis Monthan Air Force Base Claims Department under the Military Claims Act from people from the village of Vaya Chin or the Tohono O'odham Reservation are still pending. These claims concern a wide range of damages resulting from a Department of Defense-caused sonic boom which occurred at near-ground level in that

village at approximately 9:02 a.m. on December 10, 1983. These claims are still pending. Since one of the primary assertions of this revised draft Sells Airspace Environmental Impact Statement, as well as of prior drafts of the same Environmental Impact Statement, is that the Military Claims Act constitutes a viable process which mitigates a wide spectrum of damages resulting from Air Force and other Department of Defense overflights and sonic booms, the officials and members of the Tohono O'odham Nation feels that it is appropriate to see how the Air Force handles claims currently on file with them and whether these claims are, in fact, fairly compensated by the Department of the Air Force and/or the Department of Defense. Fair treatment of the Claims currently on file with the Department of Defense will be some indication that the Military Claims Act Process is in fact a viable mitigating factor in the damages which have occurred and will continue to occur as a result of Air Force and other DOD overflights and sonic booms. Conversely, failure of the Department of the Air Force and/or the Department of Defense to adjudicate these claims fairly will be strong evidence that the Military Claims Act procedure does not constitute a viable mitigation factor, as asserted by various drafts of the Sells Airspace Environmental Impact Statement. Since we fully expect to have a response from the Department of the Air Force on these claims by the end of August, 1986, it is inappropriate to schedule the hearing you requested our cooperation on until we have received the decision from the Department of the Air Force regarding these claims.

2. As you are aware, the Tohono O'odham Reservation encompasses an area the size of the State of Connecticut. Somewhat less than 20,000 people are spread all over this reservation, and the logistical difficulties of organizing a response to something such as the revised draft Sells Airspace Environmental Impact Statement are massive. As the response at a previous hearing on a previous draft of the Sells Airspace Environmental Impact Statement for public hearing on March 27, 1979, indicated, the interest and concern of the Tohono O'odham Nation and its members and other individuals residing on the Tohono O'odham Reservation regarding this matter is acute. In order for all interested parties to be given an opportunity to be present and to comment on this matter, a large amount of time is required to advertise the hearing, to deal with the logistics of transporting people from remote villages to the hearing site, etc.

Particularly in light of the fact that the Air Force has taken over six (6) years from the date of the last hearing to revise the draft on which that hearing was based, such a time frame seems more than reasonable.

At this time Colonel McKae, all that I am able to say is that the Tohono O'odham Nation is eager to cooperate with the Department of the Air Force in the scheduling and organizing of this public hearing, and the Tohono O'odham

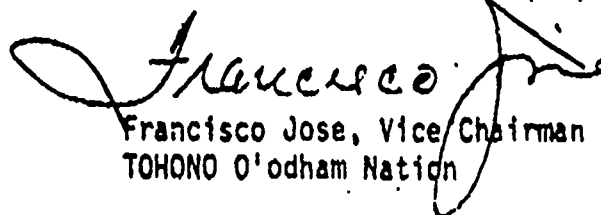
Letter - Colonel McRae
July 11, 1986
Page Three (3)

Nation does not waive the rights of itself or any of its members to have their comments heard at a formal meeting. We formally request that the deadline for public comment be extended from August 12, 1986 until a date one week after the date we agree on for the public hearing.

Tentatively, we suggest this hearing be held in late in September or early October, 1986. We suggest that the hearing be held in the village of Santa Rose, at the Santa Rosa Boarding School, a central location here on the Tohono O'odham Reservation. We would further suggest that the hearing be held on a Saturday so that as many people as possible would be free to attend without prejudice to their jobs or other work day commitments. Saturday, September 27, 1986 or Saturday, October 18, 1986 would be the preferred dates. October 4th is a religious holiday here on the Tohono O'odham Nation and it would be impossible to schedule a hearing for that date.

Please notify the undersigned at your earliest convenience which of these tentative dates will be best for you and for the Department of the Air Force. I look forward to working with you in the future.

Sincerely,


Francisco Jose, Vice Chairman
TOHONO O'odham Nation

cc: Congressman Morris Udall
Congressman John McCain
Congressman Bob Stump
Congressman Eldon Rudd
Congressman Jim Kolbe
Senator Barry Goldwater
Senator Dennis DeConcini
Mr. Josiah Moore, Chairman, Tohono O'odham Nation
Ms. Ophelia Campillo, Secretary, Tohono O'odham Nation

LAW OFFICES OF
STRICKLAND & ALTAFFER, P.C.

WILLIAM E. STRICKLAND
DABNEY R. ALTAFFER
WILLIAM E. STRICKLAND, JR.
WILLIAM W. ALTAFFER

177 N. CHURCH - SUITE 700
TUCSON, ARIZONA 85701-1119

TELEPHONE 622-3661
AREA CODE 602

November 6, 1986

David L. Peebles, Colonel, USAF
Commander
Department of Air Force
Headquarters 832D Combat Support Group (TAC)
Luke Air Force Base, Arizona 85309-5000

Re: EIS No. 860220, D Revised, USAF, AZ, Sells
Military Operation Area/Air Traffic Control Assigned
Airspace Supersonic Flight Operation Overlying
Tohono O'odham Indian Reservation and Organ Pipe
Cactus National Monument, Pima County

Dear Col. Peebles:

Our office is general counsel for the Tohono O'odham Nation and by this letter confirms the extension granted to submit written comments to the Revised Draft Environmental Impact Statement from August 12 (later extended to November 15) to December 1, 1986, which extension was previously confirmed by you in telephone conversation with Mr. Francisco Jose, Vice Chairman of the Nation.

On behalf of our client we further request that you provide us with a copy of the original 1979 Draft Environmental Impact Statement so that we can properly understand the "revisions" referred to in the current revised draft.

Sincerely,

STRICKLAND & ALTAFFER, P.C.


Dabney R. Altaffer

cc: Mr. Francisco Jose
Vice Chairman
Tohono O'odham Nation
P.O. Box 837
Sells, AZ 85634

Capt. Edwin Taylor ✓
HQ TAC/DEEV
Langley AFB, VA 23665

LAW OFFICES OF
STRICKLAND & ALTAFFER, P.C.

177 N. CHURCH - SUITE 200
TUCSON, ARIZONA 85701-1119

WILLIAM E. STRICKLAND
DABNEY R. ALTAFFER
WILLIAM E. STRICKLAND, JR.
WILLIAM W. ALTAFFER

TELEPHONE 622-3661
AREA CODE 602

November 13, 1986

Department of the Air Force
HQ TAC/DEEV
Langley AFB, VA 23665-5001

ATTN: Captain Ed Taylor

Re: Comments to EIS No. 860220, D Revised UAF, AZ,
Sells Military Operations Area/Air Traffic Control
Assigned Airspace Supersonic Flight Operations
Overlying Tohono O'odham Indian Reservation
and Organ Pipe Cactus National Monument,
Pima County, Arizona

21 [As general counsel for the Tohono O'odham Nation ("Nation"),
formerly the Papago Tribe, our office has been requested to
submit the following comments to the above referenced Revised
Draft Environmental Impact Statement ("RDEIS") for inclusion in
the final EIS. These comments are intended to supplement com-
ments submitted at two public hearings conducted by the Depart-
ment of the Air Force ("DAF"), respectively on March 27,, 1979
and October 25, 1986, in the Village of Santa Rosa, and to com-
ments to be submitted at a public hearing scheduled to be conduc-
ted by the Nation on November 14, 1986, in the Community of
Sells.

On February 9, 1979, the DAF issued an original Draft Environmen-
tal Impact Statement ("DEIS"), and a public hearing was held
thereon on March 27, 1979, in the Village of Santa Rosa. Rather
than completing the environmental impact analysis process in the
usual manner and including a verbatim transcript of the public
hearing as an appendix to the final EIS as required by DAF regu-
lations, 32 CFR Ch. VII (7-1-86 Edition) §989.15(f), the DAF
decided to revise the original document by the issuance of a
revised environmental impact statement, the present RDEIS, which
alleges that "[t]he transcript of this hearing ... formed the
basis for revision of [the original] document, "RDEIS ix, and
that "[s]pecific instances of aircraft harassment were aired
thoroughly during the course of the 1979 Santa Rosa meeting."
RDEIS 2-40. The DAF did prepare a transcript of the March 27,
1979, public hearing to be included into the RDEIS as Appendix L,
but decided to omit it from its final draft. Because this action
would effectively eliminate the hearing and the comments made
thereat from the final EIS, and because the RDEIS fails to res-
pond to all of the questions and concerns raised at the hearing,

22 → we are hereby attaching a copy of the transcript, entitled "APPENDIX L - Public Hearing Transcript - Public Comments and Responses" and by this reference are incorporating pages L-1 through L-115 into this letter, to be appended as an attachment to the final EIS pursuant to 32 CFR §989.15. The final EIS must therefore include the verbatim transcription of, and must respond to the concerns raised at all three public hearings held respectively on March 27, 1979, in the Village of Santa Rosa, on October 25, 1986, in the Village of Santa Rosa, and on November 14, 1986, in the Community of Sells.

A straight comparison of the original DEIS with the revised RDEIS raises a number of questions which require responses:

23 → 1. The DEIS established that in 1977, 10,394 supersonic sorties capable of creating sonic booms were flown in the Sells Airspace, DEIS 32, while the RDEIS estimates only 5,120 such sorties today. RDEIS 4.4. The RDEIS fails to establish whether the difference in numbers is the result of a different method of computation (and if so, what methods were used), or the result of mitigating actions taken by the DAF (and if so, what specific actions were taken and whether similar mitigations could further reduce the level of sonic boom impacts).

24 → 2. The DEIS established that a maximum of four, or more probably an average of 2.8, supersonic periods occur per sortie. This translates into a maximum of four or an average of 2.8 booms per sortie. DEIS 32. Admittedly, this equated to 41,576 (worst scenario) or 24,104 (best scenario) booms in 1977 based on 10,394 supersonic sorties. The RDEIS, however, uses an "Oceana" factor of only 0.8 booms per sortie, RDEIS 4-4, (which equates to 4,096 booms per year based on 5,120 sorties) without specifically explaining the difference in approach or result.

25 → 3. The DEIS estimated 96.4 sonic booms per day in 1977, impinging on 19 communities and affecting approximately 1,100 persons. DEIS 36. The RDEIS, however, cavalierly concludes that "[a]n individual living under the airspace would expect to hear one or less boom per day ...," RDEIS 4-4, without specifying which or how many communities or persons will be affected by such booms.

26 → The Nation strenuously objects to the RDEIS's conclusion contained in the Summary of Cumulative Impacts of Subsonic and Supersonic Noise. RDEIS §4.3.5. It implies that in the absence of an existing scientific procedure which can provide concrete and measurable proof that sonic booms have a direct physiological impact on people, the present and anticipated subsonic and supersonic activity within the Sells airspace should be permitted

since, if and when the scientific community should eventually establish such a procedure, only 10% of the population living under the airspace would have been adversely affected. The Nation believes that the DAF must be guided by the conclusions of Dr. Richard D. Worthington, that the health of an unknown proportion of the population will be affected and that "it is morally and ethically wrong for a governmental agency knowingly to subject a human population to this form of increased stress." RDEIS

27 → B-4-16. The Nation challenges the government to point to any other airspace, other than an Indian reservation, where such subsonic and supersonic activity over populated areas is permitted. Furthermore, the Nation challenges the foregoing conclusion upon the following grounds:

28 → 1. By the use of the DNL (daily noise level) mechanism the DAF de-emphasizes that affect of impulse noise, such as booms, and averages it over a twenty-four hours, even though all overflight noise is limited to only daylight hours. RDEIS 4-1.

29 → 2. The DAF used DNL values, which cannot measure health effects, when admittedly it could have used LEQ values which do measure health effects. RDEIS 4-1.

30 → 3. The RDEIS concludes that 9% of all people beneath the MTRs will be highly annoyed by subsonic overflights measuring noise levels of 61dB. These noise levels are expected to increase by four to six dB as Luke AFB based aircraft change from 500 feet AGL to 300 feet AGL. No estimate of annoyance is given for such increased noise. Nor does the report discuss the effect of a typical case of a F-16 aircraft flying at intermediate power and 300 feet AGL creating a noise of 103dB. RDEIS §4.3.2.1.

31 → 4. The RDEIS estimates that "the cumulative noise level resulting from the continued sonic and supersonic activity is a worst cast cumulative DNL of 68dB (20% highly annoyed), or a cumulative DNL for the 25% overflight case of 62dB (10% highly annoyed)." RDEIS §4.3.5. This homogenized treatment of the problem leaves one to guess at what and how many communities and people will be highly annoyed, and how often.

32 → 5. The RDEIS measures the impact of the noise upon two single criteria: (1) Will it cause temporary or permanent damage to hearing? (2) What is the annoyance factor? It ignores, or fails to incorporate into the second criteria, the fact that it is dealing with reservation land set aside by Congress as a traditional homeland for an indigenous population. Tacitly implied therein, and recognized both by the courts and the


33

Department of the Interior, is the Congressional intent that Indian tribes be recognized as autonomous entities established to govern themselves in accordance with their own customs, traditions and religion. Tohono O'odham traditions and religion stress the need for quiet and silence and for the identification, without interference, between man and nature. The intrusion of aircraft noise into the lives of the O'odham and its effect on their psychological and spiritual wellbeing must also be independently assessed, particularly in light of the American Indian Religious Freedom Act, 42 U.S.C. 1966. The burden of making such assessment lies not upon the Nation and its members but upon the DAF.

Respectfully submitted,

STRICKLAND & ALTAFFER, P.C.

By


Dabney R. Altaffer

Enclosure: APPENDIX L
Public Hearing Transcript
Public Comments and Responses

To whom it may concern,

34
[]
Sorry, I missed your meeting.
I had ~~some~~ family death so I
couldn't attend. But I'm writing
this letter concerning about my
mother's house. She doesn't speak
English well so she ask me to
speak for her. Her house is
falling in cause of the "Sonic Boom"
~~because~~ we have sheet rock on
the top, and they are falling in,
and our roof is just tin so
our house is very cold. I
am her daughter writing this
and I have a 3 yr. old girl.
She (my daughter) has develop
Arthridis (?) on her knee, and I
took her to the Doctors and
they want her to be in a warm
house but I can't help her, cause
of the "Sonic Boom" ~~and~~ knocking
our sheet rock. We also have
several windows broken
because of the same thing. We
just put boards there in place
of the window, but even though
our house is still cold. And
also we have a porch, which

Our Sheet Rock all fell in and
~~and~~ that makes our house much
much colder. So, I sure you
do something about our house
because I don't want my daughter
to get worse. So, if you people
over there would help us, our
family and many other families on
the reservation.

Thank-you,
very much!
Lucilia Amarillo

RECEIVED 3 NOV 86
PISIZONE RURAL BR
SELLS, AZ. 85634

10/26/86

Environmental Planning Division
Headquarters, Tactical Air Command
Langley AFB, Va 23665-5001

Dear Sirs,

I lead a hiking group to Organ Pipe
Cactus Nat'l Monument at least once a year.
→ Once we were "buzzed" by 2 A-7s while on the
top of Cijo Peak. Once an F-4 "buzzed" me
on the highway west of Why. Another
time I saw 2 A-10s "herding" horses
on the reservation east of Why.

35

Obviously I think such flying
is disruptive to those on the ground
and not necessary for adequate
flight training. I hope that you
would abolish low-level flying at
Organ Pipe and anywhere ^{near} reservation
villages or livestock.

As a licensed pilot, I'm not
opposed to flight training or even
seeing & hearing the aircraft. But
I can see that at an airshow
or Davis-Monthan AFB, I don't
want to see it when I'm camping.

Thank you.

1-36

John C Higgins
15608 W. Utah

Tucson, AZ 85745

November 4, 1986

Environmental Planning Division
40 Tactical Air Command
Langley AFB, VA 23665-5001

Dear Military Representative,

As a member of the teaching staff in the Indian Oasis School District #40, located in Sells, Arizona, I am writing to you in reference to the Sells Airspace Revised Draft Environmental Impact Statement for Supersonic Flights Over the Tohono O'odham Indian Reservation.

36 I have been exposed to many "sonic booms" out on the reservation. The students SEEM to passively accept the noise that is created by the supersonic flights over the reservation. However, I feel that the sounds are disruptive to any classroom situation. No matter how accustomed one can become to the sound, time is always spent getting students to refocus on their educational tasks.

Please consider the entire population on the reservation...would YOU want to be regularly interrupted by such supersonic sounds?!

Sincerely,

Karen R. West

Karen R. West
K - 6 Music Educator
P.O. Box 248
Sells, Az 85634

San Simon School
Star Route 1, Box 92
Sells, AZ 85634
November 5, 1986

Environmental Planning Division
H Q Tactical Air Command
Langley AFB, VA 23665-5001

Dear Sir or Madam:

Please find enclosed letters from my
Students in the Reading Lab at
San Simon School. They wrote
regarding the supersonic flights over the
Tohono O'odham Indian Reservation.

37 [If you have any literature or
pictures of supersonic jets, we would
certainly appreciate any material
you could send. Thank you.

Nancy J. Pittman
Reading Specialist

Environmental Planning Division
HQ Tactical Air Command
Langley AFB, VA 23665-5001
October 23, 1986

Dear Air Force:

38 [I don't like your supersonic airplanes flying low on the
O'dham Reservation. They are too noisy, they are
disturbing our homework, and we can't sleep. They
might scare the animals and make them run to the villages
and kill them. Thank you.

Sincerely,

The Third Grade Class
San Simon School

Gabriel G. Garcia
Gabriel Garcia

Rufina Ramon
Rufina Ramon

Quentin Havier
Quentin Havier

Roger Romero
Roger Romero

Zaniel
Zaniel Manuel

Jason Secret
Jason Secret

Jerome Orosco
Jerome Orosco

Clayton Ortiz
Clayton Ortiz

Environmental Planning Division
HQ Tactical Air Command
Langley AFB, VA 23665-5001
October 23, 1986

Dear Air Force:

39 ☐ Please don't fly your supersonic jets over the O'odham
Reservation.

They break windows, scare the animals, and we don't want
the bombs.

Good-bye,

The Second Grade Class
San Simon School

Almera Antone
Almera Antone

Selena Miguel
Selena Miguel

Willette Jones
Willette Jones

Renilda Ortega
Renilda Ortega

Michael Lopez
Michael Lopez

Chris
Gilbert Ortiz

Warren Lopez
Warren Lopez

Christopher
Christopher Manuel

Environmental Planning Division
HQ Tactical Air Command
Langley AFB, VA 23665-5001

Dear Air Force:

Please don't fly your supersonic jets over the O'dham
Reservation.

40 [They break windows, scare the animals, and we don't want
the bombs.

Good-bye,

The Third Grade Class
San Simon School

Benny Conde
Benny Conde

Lonny Frank
Lonny Frank

Benny Garcia
Benny Garcia

William Jose
William Jose Garcia

Herman Miguel
Herman Miguel

Environmental planning Division,
HQ Tactical air command
Langley AFB, VA 23665-5001

San 2/1/85
2-1-85

Dear air force:

41 → I don't want The supersonic
Flights over The Potomac/DHam
Reservation because my nephew might
go diff. and it is too hard to take
him to sell.

Thank-you

Sign

Sandy
1.2.85
5th

Environmental Planning
Division H.Q. Tactical Air
Command Langley AFB, VA
23665-5001

Dear

42 → Air force Please do not Fly around.
Because their noisy and it effects our
ear it hurt and you scare
animals. they run away from
Halloween carnival when they tell
who the winners are we
can't hear him talking

Sincerely
Charlene
age 10
Grade 6th

Environmental Planning Division
HQ Tactical Air Command
Langley AFB, VA 23665-5001

Dear Air Force

⁴³ → It is not a good idea for the supersonic flights over the Tohono O'odham Indian Reservation Cause it will scare the animals. And will scare the O'odham when you throw down a bomb. And they will crash on a house.

Virgil Aguila
8th.

Environmental Planning Division
HQ Tactical Air Command
Langley AFB, VA DISW49-0001

Duran, Air Force,

It is not a good idea for supersonic
flights over the Tohono O'odham Indian
44 Reservation. It will scare all the
[animals. It will make the windows
crack, and make people dumb

Leonard Ortega
8th.

Environmental Planning
Division HQ Tactical Air Command
Langley AFB, VA 22365-5001

Dear: Air Force

I want to see aiplan flying in the air but it makes
to much noise.

Sincerely,

Alfred Salvisio 5th

Environmental Planning Division
HQ Air Command Langley
AFB, VA 22365-5001.

Dear Air force,

I don't like the jets over our heads
because it scare the animals and
breaks our houses.

1-46

Gay
Miguel
6th
San Simon
School

Environmental planning Division
H.Q. Tactical Air Command
Langley H.F.B. - VA 23665-5001

Dear: Air Force,

I don't want this jet to
be fly around over The Tohono O'odham
Indian Reservation, because if it fall
down, it will hurt some of the people

From
Claudia Garcia
8th grade

San Simon

Environmental Planning Division
HQ Tactical Air Command
Langley AFB, VA 23065-5001.

Dear Air Force,

It is not a good idea for the supersonic
flights over the Tanana D'Adham Indian
Reservation. Because it could shatter windows,
scare animals.

Sincerely,
Dennis 8th.

ENVIRONMENTAL PLANNING DIVISION
HATACtical Air Command
LANGLEY AFB, VA 23665-5001

Dear

Air Force.

I dont kill the airplanes over heads
it will kill all the people, or the
Animals... Caus it will blow out the
windows, and it cracks our house. it gives
us headaches

Sincerely

Audra

Marshall

6th grad

San Simon School

Environmental
Planning Division
tactical air command
Langley AFB. VA 23665-5001

Dear air force

I do not want th.
Supersonic flights over the Tononno
Oodham reservation. The last time you flew
over my grandma had a heart attack
becus the plane was too noisy. our ear hurt

Sincerely
Carmolita

4th
Son Simon

Environmental Planning Division
HQ tactical with command
longley AFB, L10 2366S-5001.

Dear Sir on incident,
I don't want the jet
to be flying over the
Thomas Graham Reservation
because they make too much
noise

Sincerely
Linda
Teacher

811. Gmclb
St. Simon School.

Oct. 22

Environmental Planning Division
HQ. Tactical Air Command
Langley AFB. VA. 23665-5001

Dear Air force

I don't like what's happen
on the red land it makes it make
mess and it scares the animals
and the people and it break
the windows on our houses.

And our plane use a place to
have plane's over our heads
they should do it on the
white people's land.

45

a person who
think it not nice

SAN Simon School
Sells Arizona

Uzaki Carmen

Environmental Planning Division
HQ Tactical Air Command
Langley AFB, VA 2366-5001

Dear Sir or Madam

NO!! I don't want
the jets. to fly around here at our
reservation because you guys might crash
on some house and you might kill them.
46 and you might make the animal go
deaf. Also you might scare animal away.
→ like cows, horses.

Gany Carlos
8th grade

ENVIRONMENTAL PLANNING
DIVISION HQ + ACTICAL AIR
COMMAND LAM GL Eyafo VA
23665-5001

Dear Air Forces

Please Do Not Fly over
Pisinemo Village, because
It Is too noisy.

Sincerely,

Germane Lopez 4th
San Simon school 10-27/8.

ENVIRONMENTAL
PLANNING DIVISION HQ
Tactical AIP COMMAND
LANGLEY AFB VA 23665-50

Dear AirForce)

Do not fly over the
TOhono O'ODHAM Indian
Reservation It is noisy,

Gus Anton

Environmental Planning Divio
HQ TACTical Air Command
Langh AFB, VA 23065-500

~~Dear~~

Air Force,

47 → I don't like it because it
will kill all the people. I don't like the
supersonic over our reservation! They crack our
houses, they scare the animals, they gives us head
ache, they crack our windows. It hurts our
eardrums, it makes the animal deaf.

Sincerely
Adrina Anzini
6th grade

ENVIRONMENTAL Planning Division
HQ tactical air command
Langley AFB VA 23665-5001

Dear AIRFORCE,

I do not want the Booms
of supersonics jets over the
⁴⁸ Indian Reservation. I don't
want all the animals to
die.

SINCERELY,

MELVIN GARCIA

GRADE 4th

San Simon school

Environmental Planning Division
HQ Tactical Air Command
Langley AFB, VA 23665-5001, ~~A~~

Dear Air Force,

I like you to come to
San Simon school but don't do
the boom's. It is too noisy
and when you do that my
ears hurt. and you scare
the animals away and
you scare me too.

Sincerely,

1-58

Ranando Jose Maria d 4th - 1052222
San Simon school

Environmental Planning
Division HQ Tactical
Air command lang

DEAR AIR FORCE

I DON'T LIKE YOUR BOOMS OF JETS
AND AIRPLANE. THE BOOMS MAKE
ME GET ME SCARED.

Sincerely BRANDON - 6th GRADE
W.
CARLOS

ENVIRONMENT PLANNING DIVISION
HQ TACTICAL AIR COMMAND
LANGLEY AFB, VA 23646-5001

Dear Air Force,

I don't want airplanes over the
Tohono O'odham Indian Reservation.

Sincerely,

Mario Serofo
San Simon School
6th grade

Environmental Planning
Division. HQ Tactical
Air Command Langley
AFB, VA 23665-5001.

Dear Sir or Madam,
I do not want supersonic
flights over the Teton O'odham
Indian reservation. It bothers us
it broke over window and
we don't have the money
to fix it. they are noisy and
hurt over cars. and do not
fly to Manager's Dam. Sincerely,
Mildred
Nelson

4th
1-61

Environmental planning
Division HQ Tactical
Air Command Langley
AFB, VA 23065-5001,

Dear: air force

can you do me a favor, I do
not want any more jets, because
they scare the animals and they
wake up kids that go to sleep.

Shogen/ta/lin Salaza

9/10

Dear
Air Force

Hi Nic to write I just want
to ask what your names and my name is
Aliana. I live in O'odham Indian Reser-
vation please dont fly above the whole world
Cause everyone is scared you might crash over
the whole Village. We want you guys to be
safe and us too. We make you guys to be safe
and you guys make us safe. If you do we will
be proud. Cause I am scared I dont want
to die and I dont want my family and
cousins, aunts, and uncle to die. Cause
I love them but I want you guys we
love us if you do we will love you
Could you give us your phone number
we would like to draw you a picture
of airforce and I am a 6th grader and
I am only 11 years old and I have 4 br-
thers and 5 sisters and me write
Back Bye See you anytime

Sincerely,

Aliana

Ulaaco

Environment Planning
Division Air Command 6th grade

HQ Tactical Family AFB

VA 236455-5001 Sam Simon

ENVIRONMENTAL Planning Division
#0 tactical Air Command
Langley AFB. VA. 23665-5001.

Dear Air force,

I dont want the air planes over the
INDIAN Reservation Because they are scaring
the cows away. and yet the cow boys are
trying to get the cows in the corral,

Sincerely,

Donald Miguel

Sixth grade

San Simon school,

ENVIRONMENTAL PLANNING DIVISION
HQ TACTICAL AIR COMMAND
LANGLEY AFB, VA 23065-5002

DEAR AIR FORCE,

I DON'T WANT YOUR JETS FLYING
ABOVE OUR RESERVATION. BE CAUSE IT
SHAKES OUR HOUSES, SCARE PEOPLE AND
SCARES THE ANIMALS.

BECAUSE IT IS NOT PEOPLE FULL
ON OUR RESERVATION AND IT IS
USED TO BE PEOPLE FULL.

SINCERELY,

JOANNE Eguila
6 GRADE
SAN SIMON SCHOOL.

Environmental planning division
HQ. Tactical air command
Langley AFB, Va 23065-5001.

Dear

Air Force,

I don't want your jets flying
above because that one time it flew above me
it broke our window and it makes my little
brother cry and we want peace in our
reservation.

Sincerely,
Roberto Flores

San Simon School
6-grade

Environmental planning division
HQ. Tactical air command
Langley AFB, VA 23065-5001.

Dear

Air Force,

I don't want your jets flying
above because that one time it flew above and
it broke our window and it makes my little
brother cry and we want peace in our
reservation.

Sincerely,
Roberto Flores

San Geron School
6-grade

Environmental Planning Division
HQ Tactical Air Command
Langley AFB, VA 23665-5001

Dear "Air force"

My name is Jodi Pilone I am 12
years of age I'm a 6th grader what I would like to

say is hi and please stop flying
around and above our house because it
affects our tribe I know you need to practice

but one of these days you might kill a
innocent person. I remember when I lived at one
of the Reservations and my mom. was

outside washing our clothes and I was inside
watching t.v. then I heard a loud Boom I got
scared then the house kind of cracked a little

I went to go check on my mom. she

told me that she saw a lot of

smoke all about near our house then

all of a sudden to go to the hospital

49 I I care a lot about our people so please
practice some where else please!

1-68

Sincerely,
Jodi Pilone
Sam Simon

Environment Planning Division
HQ FALCON AIR COMMAND
LANGLEY AFB, VA 23665-500F

DEAR AIR FORCE,

I don't want any jets or Airplanes
around the Tohono O'odham Reservation
because it scares children and people and it
~~breaks~~ windows. We don't have enough money
to fix things. And we just want peace in our
Reservation. It used to be peaceful around
here and it's gone because you people send out
jets and we hate that so ~~leave~~ the Tohono
O'odham alone

(sincerely)
Cynthia Leon
6th
San Simon School

Environmental Planning Division
Hq Technical Air Committee
Lungilo, LFB, Vol 23665-5001

Dear Air-force

No I don't want the air
planes to be flying over our HIKWENI reservation
why? Because its to noisy and also my
grandpa doesn't like noise.

I don't want it
to be flying over our reservation cause it
will destroy things also it'll scare all my
dogs and all other animals in the bush
in the village. Also it'll scare the people
and they'll go off and the people that are
sick and they'll get scared, they will die.

Sincerely
Lionel
Baptiste.

8th grade at
San Simon
School

Environmental Planning Division
HQ Tactical Air Command
Langley AFB, VA 23665-5001.

Dear Air force,

I don't want the animals be killed because
God made them and he made you to
but not to kill animals or there will be no
birds singing to or dogs around your house it is
not nice at all.

From
Loretta Ortega

6th

BLANK

1-72

**1.2 PUBLIC HEARING TRANSCRIPT
(25 OCT 86)**

REPORT OF PROCEEDINGS

This hearing was scheduled to begin at 0900 hours, 25th October 1986. Due to buses, transporting the people of the surrounding areas to the site, not arriving at that time, the hearing was delayed. The Air Force representatives were in place at 0900 hours. The following is a verbatim transcript of the hearing:

Lt Col Sweeney, the hearing officer in this hearing, went on record at 0945 hours, 25 October 1986, with the following:

LT COL SWEENEY: Ladies and gentlemen, I am Lt Col Pat Sweeney, and would like to take a minute to explain the delay in getting started this morning. You may not know that we have been waiting for more bus loads of people to arrive before beginning this hearing. Vice Chairman Jose asked that we wait another 20 or 30 minutes before we begin the full hearing, and we will certainly do that. Mr Lewis will be translating for us this morning and will repeat the things that I have said.

(Translation by Mr Lewis.)

This portion of the hearing closed at 0950 hours, 25 October 1986.

The hearing was called to order at 1045 hours, 25 October 1986.

LT COL SWEENEY: We have small white cards in the rear of the room that Ms Luisa Bailey -- Ms Bailey, will you stand, please. (Ms Bailey does so at this time.)--has available. Mr Robles has asked that I explain to you about the purpose of these cards, which we would ask that you use this time to fill out if you would like to speak today.

(Translation by Mr Lewis.)

LT COL SWEENEY: I would like to explain that the only reason that we ask you to fill out these cards and to list your name and address is to make sure that anyone who would like to speak at this hearing receives an answer for any statement, concern, or question that they raise.

(Translation by Mr Lewis.)

LT COL SWEENEY: Also, we want to make sure that anyone who wants to receive a copy of the final version of the Environmental Impact

Statement will receive one, and we have to have your name and address in order to do that. Ms Luisa Bailey and Mr Lewis, the interpreter, have agreed to help you in filling out those cards.

(Translation by Mr Lewis.)

LT COL SWEENEY: Also, I would like to say that Air Force people have arrived with refreshments, and they are setting them up in the rear now. Coffee and cold drinks should be available and ready fairly soon. So during this time feel free to go back to the rear of the room if you would like. We hope to get started as soon as possible.

(Translation by Mr Lewis.)

LT COL SWEENEY: Thank you for your patience, and I apologize for any inconvenience.

(Translation by Mr Lewis.)

The hearing recessed at 1100 hours, 25 October 1986, and reconvened at 1124 hours, 25 October 1986.

LT COL SWEENEY: Good morning ladies and gentlemen. We would like to get started now. Once again, I would like to apologize for the delay in getting the hearing going this morning. We were hoping to delay as long as possible to insure that as many people as possible would be able to attend this hearing.

(Translation by Mr Lewis.)

LT COL SWEENEY: On behalf of the members of our presentation team I would like to say how pleased we are to have been invited here to the Village of Santa Rosa by the leaders of the Tohono O'odham Nation in order to have the opportunity to talk to you in this public hearing.

(Translation by Mr Lewis.)

LT COL SWEENEY: My name is Lt Col Pat Sweeney. I am an Air Force Trial Judge currently serving as Chief Judge of the Air Force's Fifth Judicial Circuit located at Travis Air Force Base in Northern California. My job today will be to act as hearing officer or moderator.

(Translation by Mr Lewis.)

LT COL SWEENEY: Before going further with this hearing and explaining the purposes of the hearing, I would at this time like to invite Vice Chairman Jose to make any opening remarks that he would desire.

(Translation by Mr Lewis.)

VICE CHAIRMAN JOSE: (Spoke in Papago/Tohono O'odham language.) He introduced the chairmen from the different districts who were in attendance here today. They were: Sylvester Listo from Sells, Andrew Patricio from Sells, Henry Ramon, from Hickiwan, Jonas Robles from Gu-Achi, Irene Maxfield from Hickiwan, Joseph Juan from Shuk Toak, Tony Felix from San Xuvier, and Mark Laurentine from Pisinemo.

ANDREW PATRICIO: (Spoke in Papago/Tohono O'odham language.)

ANDREW PATRICIO: (Translation by self.) I believe this morning, just to sort of quickly translate, and I don't think it takes much translation as you understood the word "Vice Chairman." They are Vice Chairmen of the district that were introduced and also the district council people, which were introduced by Andrew Patricio, the Legislative Vice Chairman. Thank you again for all coming today.

LT COL SWEENEY: Thank you Vice Chairman Jose. The Air Force would also like to thank each person here for giving up your Saturday and for permitting our team members to come to your Reservation to try to explain Air Force flight activities in this area.

(Translation by Mr Lewis.)

LT COL SWEENEY: The purpose of this hearing is twofold: First, we want to provide you with factual information concerning the proposed Air Force action, and to encourage you to ask any questions that you might have about this action. Colonel Rively, to my left, will shortly give you a briefing about the Air Force Proposal.

(Translation by Mr Lewis.)

LT COL SWEENEY: The second and most important part of this hearing is to give you a chance to speak and to tell high-level Air Force decision-makers of your feelings about this proposal to continue

flight operations over the Sells Airspace, as well as over Organ Pipe Cactus National Monument.

(Translation by Mr Lewis.)

LT COL SWEENEY: We will be breaking this hearing into three parts: First, Colonel Rively's briefing followed by a brief question and answer period for clarification of any matters in his briefing. Secondly, will come the "comment" period, where those of you who have filled out a card, this is the card that looks like this (holds up Registration Form) that you get on the table in the rear of the room, and have asked to speak will be given an opportunity or a chance to do so. Lastly, we will try to end the day with another question and answer period.

(Translation by Mr Lewis.)

LT COL SWEENEY: In between we will take a few breaks, including a break where we will be providing lunch as well as an evening meal later on. It is likely to be a full day, but hopefully it will be valuable and informative for you as well as for us, the panel members.

(Translation by Mr Lewis.)

LT COL SWEENEY: Please feel free to move about the room during the day. We plan to have coffee and cold drinks available in the rear of the room, and there is no need to wait for a break - that would only cause lines.

(Translation by Mr Lewis.)

LT COL SWEENEY: I now present Colonel Joseph Rively, the senior Air Force official, our lead panel member and spokesman for our group. He will introduce the other panel members. His briefing is designed to help you better understand this Revised Draft Environmental Impact Statement. Col Rively.

(Translation by Mr Lewis.)

COL RIVELY: Thank you for coming. Good afternoon. I'm Joe Rively from Luke Air Force Base, Phoenix. I'm the commander for F-16 operations at that base.

I would like to introduce other members of the panel. Seated to my

left is Lt Col Reed Richards, Airspace Manager from Davis-Monthan Air Force Base. Next is Ms Jody Roberson from the Legal Office at Davis-Monthan Air Force Base. Next to her is Major "Doc" Lambert, Chief of Range Operations and Scheduling for Luke Air Force Base. And next to him is Captain Ed Taylor from the Environmental Planning Office at Headquarters TAC.

(Translation by Mr Lewis.)

COL RIVELY: Before I begin the main portion of the briefing, I would like to explain just how today's public hearing will fit into the entire environmental study procedure.

(Translation by Mr Lewis.)

COL RIVELY: Air Force's continuing supersonic operations indicated a need for an environmental analysis. The Draft Environmental Impact Statement was prepared and mailed to concerned agencies. Public notification was made, and the public comment period opened. This period closes on 15 November, about three weeks from today.

(Translation by Mr Lewis.)

COL RIVELY: The Draft Final Environmental Impact Statement is tentatively scheduled for completion in January of 1987. It should be filed with the Environmental Protection Agency in February, and a decision of future actions should be made about March 1987.

(Translation by Mr Lewis.)

COL RIVELY: In this briefing, I will begin with an outline of tactical fighter operations in what we call "Sells Airspace." I will review the environmental analysis process, what it evaluates and some steps we in the military have taken to reduce adverse impacts. I will also discuss the alternatives we face and ask for your comments on the study.

(Translation by Mr Lewis.)

COL RIVELY: (Turns on slide projector at this time, showing map.) This is a map of the airspace that is used for tactical flying training in Arizona. It shows Tucson and Phoenix. In the Phoenix area we have Luke Air Force Base and Williams Air Force Base. In the Tucson area we have Davis-Monthan Air Force Base and the National Guard training at Tucson Air Force Base. Farther to our

west is Yuma, Arizona, where the Marines have a base.

(Translation by Mr Lewis.)

COL RIVELY: The mission of each of those bases is to train new fighter pilots how to fly the Air Force F-16, F-15, A-10 or A-7. They have not previously flown the airplane. They spend about six months at that base learning how to fly the airplane and to fly the airplane in combat.

(Translation by Mr Lewis.)

COL RIVELY: The training takes about six months, and when they leave those bases, they will go to other bases worldwide to be ready to fly in combat, if required.

(Translation by Mr Lewis.)

COL RIVELY: The flying training that they receive while at their training base is to teach them how to drop bombs and/or to fly air-to-air combat.

(Translation by Mr Lewis.)

COL RIVELY: What is not shown on this chart is additional training areas to the northern part of Arizona, which are also used.

(Translation by Mr Lewis.)

COL RIVELY: (Slide changes to show picture of an aircraft.) This is an F-16. They are stationed at Luke Air Force Base, about 100 airplanes total, and also at Tucson Air Force Base.

(Translation by Mr Lewis.)

COL RIVELY: Its primary mission is to drop bombs. So our primary training is low altitude flying to the gunnery ranges at Gila Bend to practice dropping bombs.

(Translation by Mr Lewis.)

COL RIVELY: Their training takes about six months from when the pilot first arrives at Luke Air Force Base and starts his initial training in the F-16, until he has gone through the air-to-air combat training and the air-to-ground combat training, and then he

goes to his base somewhere in the world.

(Translation by Mr Lewis.)

COL RIVELY: Training in the F-16 is also done at bases in Florida. (Slide is changed to show another type aircraft.) This is the F-15. It is at Luke Air Force Base, and it does training primarily in air-to-air combat. Their training program is about three months long.

(Translation by Mr Lewis.)

COL RIVELY: (Slide is changed to show another type aircraft.) This is the F-5. It is at Williams Air Force Base, south of Phoenix. It trains in both the air-to-air and air-to-ground missions.

(Translation by Mr Lewis.)

COL RIVELY: (Slide changes to show another type aircraft.) This is the A-7 aircraft. It is at Tucson Air Force Base with the Air National Guard. Their training program is about three to four months long, and they train all the Air National Guard pilots to fly the A-7. Its mission is primarily air-to-ground.

(Translation by Mr Lewis.)

COL RIVELY: (Slide changes to show another type aircraft.) This is the A-10 aircraft at Davis-Monthan Air Force Base, and its mission is air-to-ground, also.

(Translation by Mr Lewis.)

COL RIVELY: (Turns slide projector off at this time.) All the aircraft that we have just shown fly in the airspace throughout Arizona, also to include Sells Airspace. All flights into these areas are scheduled through a central office at Luke Air Force Base. That office controls not only Luke flights but also aircraft from Williams, Davis-Monthan, and any other aircraft wanting to fly on the ranges.

(Translation by Mr Lewis.)

COL RIVELY: When we fly in an area, we are disturbing the environment. The Revised Draft that we are discussing was put together for the waiver review needed for our continued operations,

both supersonic and subsonic in Sells Airspace. This Draft has taken considerable time to write so that we could be certain of answering the concerns you voiced at the 1979 Public Hearing. Also, the types of aircraft flying in the Sells Airspace have changed.

(Translation by Mr Lewis.)

COL RIVELY: The environmental review covers issues in the Revised Draft. I would like to just deal with the one which is of most concern and that is, noise.

(Translation by Mr Lewis.)

COL RIVELY: Noise impacts on people, animals, historical sites and structures. Subsonic noise - the continuous sound you hear when an aircraft passes by is disturbing and at times difficult to ignore. For this study the aircraft noise is averaged throughout the entire day, not for the effects of just one flight. However, at the levels of sound thus made no hearing or health effects are expected.

(Translation by Mr Lewis.)

COL RIVELY: Supersonic noise is a sudden sharp noise like a thunder clap. While startling, the effects of sonic booms normally decrease as the operating altitude of the aircraft increases. Actions which we have taken and will discuss later have reduced the number of sonic booms which reach the ground.

(Translation by Mr Lewis.)

COL RIVELY: Noise is annoying. At times the noise of our aircraft may upset you. Again, we hope that we have taken steps to alleviate that.

(Translation by Mr Lewis.)

COL RIVELY: Studies done by medical authorities have not determined any long-term effects of noise. There is evidence that noise, including sonic booms, does generate stress in individuals.

(Translation by Mr Lewis.)

COL RIVELY: Noise, both supersonic and subsonic, does not appear to adversely affect either domestic animals or wildlife in the Sells area.

(Translation by Mr Lewis.)

COL RIVELY: Flying operations in Sells should not affect any of the historical sites or cultural resources. Noise effects on structures should be limited to claims for occasional window breakage.

(Translation by Mr Lewis.)

COL RIVELY: These impacts and other environmental effects are covered in much more detail in the Draft Environmental Impact Analysis.

(Translation by Mr Lewis.)

COL RIVELY: We realize the noise from our airplanes flying here disturbs you. Because of the problems you have told us about in the past, we have done many things to try and reduce its effect on your Reservation and the National Monument. These actions involve restricting flight to no lower than 3,000 feet above ground level, except on training routes; using supersonic training areas, such as Gladden Airspace, which is northwest of Phoenix; and prohibiting supersonic flight checks and limiting the supersonic engagement area.

(Translation by Mr Lewis.)

COL RIVELY: Pilots' briefing programs have been improved and pilots using Sells are reminded of restrictions just before flight. Squadron briefing rooms all have maps showing locations of noise sensitive areas, such as the maps posted on the wall to my right. Low-level military training routes have been reduced in the Sells area from 15 to 7.

(Translation by Mr Lewis.)

COL RIVELY: Flights which involve a great deal of supersonic operations are limited to daylight hours and when possible, flown in areas away from Sells.

(Translation by Mr Lewis.)

COL RIVELY: Flight simulators are machines, which duplicate the effects of flight, and are now used to provide some of the training formerly flown in the Sells area.

(Translation by Mr Lewis.)

COL RIVELY: A public affairs program has been established with a committee working to improve relationships between the United States Air Force and the Tohono O'odham Nation.

(Translation by Mr Lewis.)

COL RIVELY: We want to identify one office to deal with problems that may continue to come up from our flying in the Sells Airspace. My office will talk with Tribal and district level officials to help determine who that single point of contact should be, how best to understand your problems, and how best to explain our continued need to fly in Sells Airspace.

(Translation by Mr Lewis.)

COL RIVELY: Luke Air Force Base's proposal is to continue flight operations in the Sells Airspace overlying the Reservation and Organ Pipe Cactus National Monument. There are three alternatives to this proposal.

First, denial of the supersonic waiver. This would adversely impact on the training of our combat pilots.

(Translation by Mr Lewis.)

COL RIVELY: The second alternative - a set of options on low-level flying training - was reviewed. These options were: To change flight routes; raising the lowest flight training levels; moving the military training routes to other areas; and/or stopping all low-level navigation training in the Sells Airspace.

(Translation by Mr Lewis.)

COL RIVELY: Some of these options have already been done. Others, however, would seriously impact our training programs, or, were not possible to do in this area.

(Translation by Mr Lewis.)

COL RIVELY: The training routes we are using were developed after careful consideration of mission requirements, aircraft capabilities, and environmental issues.

(Translation by Mr Lewis.)

COL RIVELY: Some of the effects of our operations in the area have been reduced because of the actions taken which I briefed earlier. The third alternative is a set of options on supersonic training.

(Translation by Mr Lewis.)

COL RIVELY: Some of the options are: moving supersonic training to other military operating or restricted areas in the United States; raising the lowest point above the ground for supersonic training flights; stopping supersonic training; or setting up new training areas for supersonic flight.

(Translation by Mr Lewis.)

COL RIVELY: Again, some of these have been done - others would seriously impact the mission, because they would reduce flight training and/or increase the cost of training to our combat pilots.

(Translation by Mr Lewis.)

COL RIVELY: We are here today to hear what you think about Revised Draft Statement. We want to give the person making decision as much information as possible about the impact supersonic noise may have on the people, animals, buildings, air and other environmental factors.

(Translation by Mr Lewis.)

COL RIVELY: This is part of the review process which allows us to fly supersonic speeds below 30,000 feet. This waiver must be reviewed every three years.

You have now heard how we use the airspace over your homes, what studies have shown the effects to be, the steps that the U.S. Air Force has taken to ease the effects, and the other alternatives to the situation.

(Translation by Mr Lewis.)

COL RIVELY: This public hearing is for you to tell us if you think we have covered all the main points. Relevant comments you make and direct at the Draft will be covered in full in the final environmental statement. Copies of the final impact statement will

be sent to the people who speak here and those who give us written comments. Copies will also go to the local libraries.

(Translation by Mr Lewis.)

COL RIVELY: We want to keep you informed. I want to thank you for coming here today. Those of you who want to submit a written comment should send it to the address on the information sheet provided. Please mail your comments not later than 15 November.

(Translation by Mr Lewis.)

COL RIVELY: Thank you very much.

LT COL SWEENEY: Thank you, Col Rively. We will take about a 10-minute break in just a moment, so that those who desire to speak may take the time to fill out a card at the table in the rear of the room. Our interpreter, Mr Lewis, and Ms Luisa Bailey will assist anyone who desires to fill out a card and speak or receive a copy of the final environmental impact statement.

(Translation by Mr Lewis.)

LT COL SWEENEY: I would like to once again explain that the only reason for the cards, these white registration forms, is to make sure that those who speak today receive an answer for their concerns and that anybody who wants to receive a copy of the final version of the EIS is able to do so.

(Translation by Mr Lewis.)

LT COL SWEENEY: We will take a brief break at this time of about 10 minutes. Thank you.

(Translation by Mr Lewis.)

The hearing recessed at 1211 hours, 25 October 1986, and after consultation with Mr Jose, reconvened at 1222 hours, 25 October 1986.

LT COL SWEENEY: Ladies and gentlemen, since we are so close to lunch, we decided that it would be better to allow people to go ahead and continue to eat lunch at this time and take an extended break for the lunch period. We will begin the public hearing again shortly after lunch.

(Translation by Mr Lewis.)

LT COL SWEENEY: For your information, the food that is provided in the left rear of the auditorium is provided by the Air Force. I have been informed, also, that there is food, which has been provided by members of the Nation, out in the hallway of the school. I believe immediately outside there is a vendor also available if anyone would like to participate.

(Translation by Mr Lewis.)

LT COL SWEENEY: We will get started again as soon as everyone has had an opportunity to have lunch.

(Translation by Mr Lewis.)

(There were approximately 50 - 55 people in attendance prior to the lunch break which was taken between 1224 hours, 25 October 1986, and 1312 hours, 25 October 1986.)

LT COL SWEENEY: I hope everyone has had an opportunity to complete their lunch.

Before receiving any comments or any questions that you might have about the Air Force proposal, I would like to take a couple of moments to explain the procedural ground rules for this hearing.

As the hearing officer it is my job to help make sure that anyone who desires to speak at this hearing gets an opportunity to be heard.

(Translation by Mr Lewis.)

LT COL SWEENEY: I am not here as an expert on this proposal or the Revised Draft Environmental Impact Statement which has been filed concerning the proposal. Although I, like many of you, have familiarized myself with the Draft Statement. My principal responsibility is to insure that this hearing is conducted in an orderly fashion and is adequately recorded.

(Translation by Mr Lewis.)

LT COL SWEENEY: I have not participated in the development of this proposal, and have not rendered any legal advice or assistance.

Likewise, I will not be making any recommendations or decisions after this hearing with regard to whether this Air Force proposal is to proceed, be modified, or be abandoned.

(Translation by Mr Lewis.)

LT COL SWEENEY: You will have ample opportunity to make comments, either in written form or orally, here in this public hearing concerning the adequacy of the Revised Draft Environmental Impact Statement. Those of you who have already signed up to speak may wish to reserve your questions for the conclusion of your comments.

(Translation by Mr Lewis.)

LT COL SWEENEY: A verbatim transcript of everything that is said in this hearing will be prepared by a qualified court reporter - that is Ms Lange, seated to my right - and will be used along with written statements, which any of you may care to submit, in preparing the final Environmental Impact Statement. This will be used by senior decision-makers in the Air Force in evaluating the Air Force proposal.

(Translation by Mr Lewis.)

LT COL SWEENEY: This hearing is also being recorded by audio equipment to insure that the record of public comment received today is accurate and complete. The court reporter will be attempting to take down exactly what each person says. That is a very difficult job. I ask that you speak loudly and clearly and do not interrupt other speakers, or some of the words or phrases may be lost.

(Translation by Mr Lewis.)

LT COL SWEENEY: We, the Air Force representatives here today, unfortunately, speak and understand only one language. In order for us to compensate for our inability to communicate with all of you, we have asked for and have gratefully received the services of Mr Lewis as interpreter throughout today's hearing. We appreciate your understanding in the matter of using an interpreter and hope that will not cause an inconvenience for any of you.

(Translation by Mr Lewis.)

LT COL SWEENEY: So in making any statements or in asking a question

at today's hearing I ask that you break your remarks into enough small sentences so that the interpreter will be able to translate it for the benefit of certainly the Air Force panel, to make sure that we understand what you're trying to say, as well as others present in this audience.

(Translation by Mr Lewis.)

LT COL SWEENEY: Also, it would be very helpful for the news media and the court reporter if you would spell out any name or organization that you think might be difficult to spell.

(Translation by Mr Lewis.)

LT COL SWEENEY: Staff Sergeant Woods, who is sitting to my right, is serving as my administrative assistant to help me keep track of the time and to organize the order of the speakers throughout this hearing.

(Translation by Mr Lewis.)

LT COL SWEENEY: If any of you would like to submit written statements today, you may do so, and the lady that I identified to you earlier, Ms Luisa Bailey, in the rear of the room - who is now standing - will be happy to take those statements. Ms Bailey is from the Luke Air Force Base Public Affairs Office, and she will collect these statements.

(Translation by Mr Lewis.)

LT COL SWEENEY: Or, you may mail any comments to Air Force officials at Headquarters Tactical Air Command, Langley Air Force Base, Virginia, within the review and comment period which ends on November 15th, 1986. Therefore, any written comments or questions about the Revised Draft EIS should be mailed or submitted by November 15th, 1986, to the address which is listed on the hearing handouts. There should be enough copies of this handout at the rear of the room, so I will not repeat that address for you at this time. But that is the address to which you should mail your comments.

(Translation by Mr Lewis.)

LT COL SWEENEY: Finally, as the hearing officer, I want to briefly remind you of the twofold purpose of this hearing: First to provide

you, the members of the public most likely to be affected by the Air Force flight activities in question, with an additional means of presenting information and your comments to Air Force decision-makers on the environmental impacts to your community that may result from the Air Force proposal for continued flight operations.

(Translation by Mr Lewis.)

LT COL SWEENEY: Secondly, it provides you with an opportunity to receive factual information about the proposed action and to ask questions of knowledgeable persons about this project. However, I would remind you that this is not a trial. It is not a cross-examination of the Air Force panel members; nor is it a debate. So I ask that you refrain from either applauding or reflecting displeasure with the comments of any speakers, as such actions tend to detract from the purpose of this hearing and could interfere with each person's ability to freely express their views.

(Translation by Mr Lewis.)

LT COL SWEENEY: During the next portion of this hearing, we will be receiving the oral comments of those of you who have asked to speak today and who have filled out a speaker card. During this comment period, Col Rively and the members of his team are not likely to respond with remarks after each speaker has made his comments to this public hearing. They will only be offering their comments if clarification appears to be necessary to avoid any misconceptions or inaccuracies.

(Translation by Mr Lewis.)

LT COL SWEENEY: As a reminder, we will have a question and answer session after this comment period is completed; that is, after all of those who have filled out the cards and have desired to talk are given a chance to do so.

(Translation by Mr Lewis.)

LT COL SWEENEY: Our first speaker this afternoon will be Vice Chairman Francisco Jose. Mr. Jose.

(Translation by Mr Lewis.)

VICE CHAIRMAN JOSE: (Spoke in Papago/Tohono O'odham language and then in English) I come here before you today as the Vice Chairman

of the Tohono O'odham Nation. I welcome you, as we have people for hundreds of years, hundreds of years where our Nation or our people, our nomadic Tribe, wandered between the present day cities of Yuma, all the way to Bisbee, and all the way to Phoenix. We welcome you here today, and we wish to express concerns concerning this EIS.

I think seven years ago, in 1979, we had a like or similar meeting. I think it was the original meeting. It was held in this exact location. I think approximately 500 people made comments to the Air Force then. I think the faces here have changed. We made comments to the Air Force, some of our elders who are no longer with us. Some of people that are former council people and are still council people made comments, comments that they expressed strong objections and concerns regarding the sonic booms and the numerous over-flights across this Nation. Incidents were included within those comments of near tragedies and quite possibly tragedies, because at different times our people do not know how to translate their fears or their illnesses which could be attributed to some of these over-flights or the sonic booms.

50 [I come to you today because those issues, those concerns, and those objections have not been addressed. I think from this EIS they have even been omitted, the transcripts of the original comments that were made. They are still there. Although you do not see the original 500 people, but I wish to bring them from the past to make it known that those objections are still very strong.

51 [We will submit those comments or again reserve the right to submit those comments at a later date. We have eight video tapes of eight hours that we have put together and will submit and attempt to submit before November 15th.

We will be holding another public hearing on the 14th of November, at our Capitol Building, where we will gather information from all the district chairmen, from all the Tribal council people, to submit to the Air Force.

52 [At this time I would like to ask you that if there is any way possible that you could give us a few extra days, up until the 19th, to submit those comments. Because to put the comments in written form it will take us a few days. This was the original date that we attempted to negotiate for to have the public hearing, but that wasn't possible.

I think it has taken seven years for the Air Force to come back with an EIS. Originally, when we received, after numerous inquiries about the EIS--I think I have inquired for three years about this EIS, and I finally received one in July. When I received it in July, I was contacted and told that I had about a month and a half to respond. Now, that is very difficult to do, as you can see from the document itself, and from the communication difficulties that I think were mentioned, such as our own language, and trying to, I guess, interpret this whole document to our people was going to take some time. The Air Force itself has taken seven years. Yet, we were told to respond in a month and a half. All I ask is that we be given until November to attempt to do this. We will still have the public hearing. We will still make those comments, and we will submit those comments.

53 [The Nation has passed a resolution against the over-flights. They have always been against the over-flights and the sonic booms. I don't think they have changed that attitude or that objection. In past years I've made comments and I have been asked about the national defense. I have said in the past, "That's fine, I believe in national defense." But what you are doing to my people is a detriment to their well being and their health. If it is for national defense, how come there are other areas not being utilized? I believe this problem of over-flights and sonic booms are not just a concern of the Tohono O'odham Nation. It is the concern of rural people in Texas and New Mexico, in Nevada and Utah, and I believe in California. So it is not just a Tohono O'odham problem. It is problem of rural people with varying backgrounds.

I would now like to make comments about the EIS itself. I've listened to Col Rively make statements like "Does not affect," "Should not affect," "Occasionally," and "Attempt to alleviate," but it doesn't address the issue of the tragedies that might occur. I think what might happen is, we've had some near tragedies where people have almost lost their lives. Are we going to wait to that point that somebody does actually?

Approximately three years ago we had an incident out here at Vaya Chin where on our initial contact from the people, and we attempted to address, was a comment from the Air Force at Luke and Davis-Monthan was that, "No, we couldn't be us. It wasn't us." It never said that it could be someone else. Eventually we had follow-up meetings in Vaya Chin to where the Air Force did admit that it was someone from the Air Force that caused that sonic boom. We do have

tapes to that admission by the Air Force.

I think those things have happened, and it happened on that one occasion. I believe that there are members of the community here that will speak to that. Although your EIS mentions the--I think it takes consideration of all aspects, and it does mention psychological. It says that there may be those problems. But if you talk to Air Force personnel they will also tell you that that fact has to be established. They do admit that it may occur, there may be psychological effects, "But do you have a basis?" We are not here to gather data for the Air Force. Our people know what those effects are. But from the Air Force point of view it is that our people have to be studied for 15 years to see if there is a psychological effect to create that basis. I think there are people here who have suffered through that and will comment on that.

54 → For national defense, I guess, we will have to--I guess be affected from now on. I think that your over-flights were brought out west because originally you started in the east, and because people started populating the area you moved on out west. We have been told that the terrain here is similar to those terrains that quite possibly may be battlegrounds. We can understand that. What I'm saying is that my people have suffered long enough and they wish not to continue to suffer from that.

55 → I think you've forgotten to include in the EIS the new helicopter base that is going to be--that has now been put in at Mirana. How does that go into this EIS? It isn't mentioned in the EIS, but somehow I bet you that it will become part of this EIS, if this is approved. We do know that those helicopters are going to be flying missions out here.

And then there is a new word in the EIS which we didn't face before. I don't think my people know enough to know that you have listed "supersonic" and "subsonic", but I think you have stressed the fact of "supersonic." Supersonic are the ones that cause the booms. I think one thing that--well, I know that the sonic booms before were not of the impact that they are now. The sonic booms that hit upon this Nation are like gun shots. They are like gun shots early in the morning or late at night these times.

So this is a serious problem for the Nation. I think my people have become so frustrated that I have heard reports or comments from people that they have actually taken shots at those jets. You've been aware of them for seven years. We have been aware of

them for 30 years.

I cannot address for national defense what your needs are, but you are making my people suffer. They do not want the sonic booms. They do not want the over-flights.

There is no one here to speak for Organ Pipe, but Tohono O'odham people used to reside on the Organ Pipe. There was something that you were saving there where the idea was to save for prosperity, the Organ Pipe, and you set up a park, but do you actually know what you are doing to it?

56 [There has been studies in the City of Tucson on helicopter noise and you created an ordinance. Yet, we made a resolution that it stop. When are you going to address the original public hearing when today you are here to address another EIS? It seems like our comments are in vain. When do we make our comments known and when are they taken to heart?

Again, I would just like to say that we will reserve our right to present written statements to you on the EIS. Also, if you could allow us a few extra days to submit the information from our November 14th Public Hearing. Thank you.

LT COL SWEENEY: Thank you, Vice Chairman Jose. We welcome the written statements that you will be submitting. As hearing officer, I do not have the authority to extend the review and public comment period which ends on the 15th of November 1986. I appreciate your statement where you indicated that you will attempt to mail or submit your written statements or your written tapes by that date. Your desire that an extension be granted will certainly be communicated to Air Force authorities. But, as I indicated, I do not have the authority to extend the review and public comment period which has been published through the Federal Register. Thank you for your comments.

Our next speaker will be Mr Jonas Robles, who is the District Chairman from the Gu-Achi District council, who are our hosts here today, and we thank him very much for giving us the opportunity to attend. Mr Robles.

JONAS ROBLES: (Spoke in the Papago/Tohono O'odham language and then in English.) I would like to address the Air Force personnel here. This has been a very short time to really get any input, especially from my district, from the people. Somewhere it was

mentioned about a point of contact. I don't know, maybe somewhere there is somebody compiling all of this information or somebody that has kept up with some of the complaints or other things like that. But as far as the impact on my people I could probably say a little on that. Sometimes I hear a lot of the elderly kind of relate to this sonic boom in the way that most people don't want to talk about it. They like to have a real quiet place. It has to do with the growth of the Tohono O'odham, to grow strong. Most people don't want to talk about it because it occurs during sacred times like birth. Sometimes a lot of people have come. Because of these sonic booms is why a lot of the young children--well, I can't really say too much about them, but that is just one of the things that I've heard.

57 [I also wonder about the statement. It don't make sense. I've watched the grass, somehow turned yellow, lots of old people think it comes from fumes from the jet aircraft flying at low altitudes. So that is about all I have. Thank you.

LT COL SWEENEY: Thank you, Mr Robles. Our next speaker will be Mr Juan Thomas.

58 [MR JUAN THOMAS: (Translation by Mr Lewis) At the first hearing I didn't know about the agreement between the Air Force and the Tohono O'odham. My grandparents told me not to scare anyone. That to scare someone might psychologically affect them or possibly cause death. Our tradition is not to make noises. But now the white man comes and brings all these things. I didn't know the purpose of the Air Force. It might be to our benefit or not. All these noises affect us. If I holler loud one of these sitting in front of me might fall probably dead. If I tell one of these men sitting in front to go stand up there and I'll talk loud in their ears with a microphone, they would probably not like it. As I stated before, all these noises affects us. It affects an unborn child if the mother gets scared by these noises. At the last public hearing there were 500 people, and all of them spoke against the sonic booms. In this blue book a number of doctors have explained what will affect the human. The Air Force personnel knows the effects. White men are smart. Why can't they do something to stop the noises? A survey was done but did not indicate the number that were affected. Many white people are against the noise and the Air Force listens. But us, they don't listen. Why don't they go to the moon and do their sonic booms up there where there is no one living? But then it might ruin our

59 ↓

↑ moon.

It has been taught by the elderly long ago that the noise will affect the people. I wonder what our elders would say if they were still living.

LT COL SWEENEY: Thank you, Mr Thomas. Our next speaker will be Mr Ernest Pablo, Sr. - Mr Ernest Pablo, Sr., has apparently left. If anyone does see Mr Pablo return to the hearing room, please let me know so we can insure that he has an opportunity to be heard.

(Translation by Mr Lewis.)

(An unidentified person from the audience stated that Mr Pablo had gone to Phoenix and would not be back.)

LT COL SWEENEY: Thank you very much. Our next speaker will then be Mr Linus E. Chana.

LINUS CHANA: (Spoke in Papago/Tohono O'odham language and then in English.) I want to translate. I don't know if I will say the same thing. I was saying earlier, at the beginning, I'm not speaking for anybody but for myself and my family who are not here with me. I was saying that I have been living here at home prior to 1979. But prior to that there were no sonic booms - maybe once in awhile there might be one of the private planes, a small plane. Everything was quiet. It seemed like people lived in peace. We enjoyed our lives; I did, when I was in my childhood days. When I came back in about 1971 that's when I noticed. It never bothered me because living in the city - I was in California - there were all the noises that you hear, city noises, and of course anybody who lives in the city can get used to all kind of noises. But out here, being out in the desert and mountains it is so quiet. That is why I can't blame these people for complaining about the jet noises, because they are not used to those kind of noises. Some of them, I don't think, have ever lived in the city before or have never lived in the city at all. Some of us have had a chance to live in other parts of the United States and we do understand some of those noises, which are necessary noises that we have to expect in the city.

In 1979 when they had the public hearing, I was in Tucson. I did not come to that hearing although I wanted to attend. I was going to school at the time, and I could not get away. But I read some articles in the Tucson papers about certain complaints that were

60 brought to that hearing. The comments that I read--some of them I don't remember. However, I have clips, but I didn't have time to take them out. I did notice that there were some in the books that we signed for. I waited for something to happen and maybe those noises would subside, maybe they would eliminate those noises completely, or maybe reroute the jets and not over the villages, which in this case over here at the Sit-Nakya Village, which is up on the east side, and this village, the Santa Rosa Village, and Vaya Chin Village and Hickiwan Village, all of which were mentioned in those newspaper articles, you know, where the damages have been done by the jet sonic booms.

Every once in awhile, during the summertime, everything would be so quiet in the village. Then all of a sudden a jet will suddenly appear and you can hear the loud noise - you know how they sound. You almost have to jump up from whatever you're doing and look out to see where they are. I wouldn't think it was a strong wind because the winds around here don't blow that loud. There was no rain, no thundering or anything that could make that much noise. They will pass through here. If they are coming east, going west, they might hover over the village once or twice or three times, not right in the--I don't know how--they make a big circle around the village, mostly in this area to the south and to the north until they head on to wherever they are going. Sometimes, during the summertime, you will hear this loud sonic boom. Everything will start rattling, the buildings, the windows, which somebody has already stated before.

Most of our houses that are made by our people, the old people. Some of the houses that I know are probably older than myself and were made out of adobe and are plastered with cement. They are easy to crack if they are shakened. If there was an earthquake those buildings would grumble. A lot of houses have been damaged.

Everybody complains, but nobody comes up to our own authorities here, our leaders, our Tribal Council, chairpersons. We used to think it was up to the Tribal Council itself, the general council, that they should be the one to handle that. But they will not do anything about it unless we, as people in this Nation, turn to our own Council and complain, send our complaints to them, which Mr Jose has already stated. I have read some of the complaints that he has which he has already stated.

I said if nobody says anything about these things this will keep on and on. We have to come forward. We have to face people. If they

come out here we will face them. We will tell them, tell them what we think about it. Maybe perhaps there are other solutions that we can discuss and maybe eliminate some of these noises that have been bothering our elders.

So that is why I made my point to be here today to say a few of these things, little comments here. Maybe we can hopefully have something accomplished in the very near future. Thank you.

LT COL SWEENEY: Thank you very much, Mr Chana. Our next speaker will be Mr Tony Felix.

61 [TONY FELIX: Good afternoon. My name is Tony Felix. I am from San Xuvier. I used to work for the Tribe. I worked for the Tribe for about seven years from daylight to late at night. I've watched the Air Force flights that go on the Reservation. I've observed how low they come, and I addressed that at our last gathering in 1979. I would like to state on behalf of the Tribe and the individual members of the Nation that there has to be some kind of action by our Tribal government. I know that the Impact Statement is here now and is going to be in final form in February or March. I also understand that some of your flights will increase instead of decrease.. I understand that in 1985 you had a certain number of flights. I also understand that some of those flights were reduced quite a bit. I can't really put my finger on what the Impact is trying to say. Are they trying to say they are increasing gradually in low areas of flight? I can't really come up with that information, because I am not an expert in that field even though I have dealt with impact statements before. There are a lot of areas that need to be clarified.

62 [One of the areas that I would like to address is the letter itself addressed in your booklet saying that August 12th was the last day for comments. Now, I am hearing otherwise and that your last comment day is November 15th, and the final Impact Statement will be out in March, as I understand it. The hearing that was done in 1979, I thought something would be done right away pertaining to those things that were brought out. I've never known an impact statement, which is federal law, to take so many years to come up with a final draft portion. It has taken the Air Force quite a while. I do know that not all your findings that were done is in that blue booklet. The portions that are in that blue booklet are only the portions that you would like to lead us to believe that it is true that you are doing something.

There are a lot of areas that concerns everybody, mainly the noise. 4.3 is the page for noise. The impact on the individual is, I guess, a debate issue. Those people who did the research are not the people that reside here. Therefore, I kind of may disagree with that area. I think it was already stated that in our beliefs that the noise could kill you. I'm pretty sure that there are other things related to that particular noise. In our environment we like peace and quiet.

64 [Another thing is the letter that was addressed to FAA protesting the low-flying aircraft. There are some alternatives in your blue booklet. I think the Tribe and the membership would like to see the discontinuing of low flights completely. I think you should also develop additional routes, not on the Reservation but off of the Reservation. I think that your Air Force supersonic policies - I'm not too familiar with that, but in your blue booklet it states that over water you are allowed to go supersonic speed at about 10,000 feet. Like I already stated, I'm not an expert, and I don't have that good of an eye to really tell where 10,000 feet is. So, again, it takes an expert to really tell you when you are above the 10,000 foot level. Also, your other one is your 30,000 foot level, which is, I guess, the same speed.

65 [There are some areas in there, the subsonic and supersonic speed, I can't figure that out either. I thought maybe I could go from your blue book, but it looks like it talks in two areas. One is that it is a high altitude flight, about 10,000. In another area it defines it as a low-altitude flight, so I'm lost there. I wish you would respond at the end of this hearing.

I think that your low altitude flying shouldn't be done at all. I don't know if you are doing that at night now; but I do know that you are doing that during the day. I'm not out as often as I used to be, so I'm not too familiar with what kinds of flights you have now. But those things that were voiced in 1979 are still there. I think that in order for us to really understand your reason for doing the flights over the Reservation is for us to go over again, because we are constantly changing as far as officials and officers of the Air Force. I know that you do have a public relations office but even that I don't get to see them out here knocking on doors. I do know that Legal Services did also do some inquiry for the individuals, but at the present, I'm not aware whether that is still ongoing or not. I think that that should be worked out, also.

The other thing that I would like to address is your hearings. Your

b6 [hearings and your publicity on this meeting was not publicized too good. I had heard that it was last week. Then, as of yesterday, I finally heard that you were going to provide transportation. The other thing is that I'm coming from Tucson to come to this hearing, and I think there are a lot of people without transportation that come from the south of here that may not have had the opportunity to come to this hearing for one reason or another. I think you should do two more hearings, one in the immediate area of Sells, which is the largest area that you do your flights, where the community population is around 3,000 people. The other one is to the far west near the Organ Pipe area, which is also quite a large area. People in that area don't have transportation. I think a hearing should be done in that area. Probably your best bet would be a large building with a capacity like this one in the San Simon area. So that would give the other people opportunity to voice their concerns.

I think that is all I have. I have until November the 15th, as I understand it, to respond in black and white. And if the Vice Chairman is saying also that the Tribe is getting into it, and what we don't approve of we will also do it at a Tribal level. But as far as an individual, I will respond in black and white to some of those areas that I just stated. Thank you.

LT COL SWEENEY: Thank you, Mr Felix. You are correct that the period of submitting written comments is until the 15th of November.

(Translation by Mr Lewis)

LT COL SWEENEY: We will take a brief break of about 10 minutes. When we return from the break we have approximately five people who have asked to speak, and we will hear from them before going into a question and answer session.

(Translation by Mr Lewis.)

(The hearing recessed at 1446 hours, 25 October 1986, and reconvened again at 1512 hours, 25 October 1986.)

LT COL SWEENEY: We would like to get started once again, please.

(Translation by Mr Lewis.)

LT COL SWEENEY: Our next speaker will be Nellie Cachora.

NELLIE CACHORA: My name is Nellie Cachora. I live in the Schuk Toak District, which means "Black Mountain," east of the Reservation, about two and a half miles west of Three Points.

On the evening of October 12, 1986, at about six o'clock, just about supper time, we were all in the kitchen getting ready to sit down to eat supper. All of a sudden a plane came over the hills - that's on the east side of the house - and it almost came and hit the house. It sounded like it almost sat on the roof. It frightened us, and we didn't know what it was. So it seems like it was flying at a distance, but it was flying so close. I never did notice it that close. There is a lot of opening on the south side of the house to fly, not over my house. It was so scary. There is a lot of space on the south side which it could come up the hill. Or maybe there was someone that had never flown through there and didn't know that there was a house on the side of the hill. I would appreciate very much if they could find another way to come through so it would not frighten us as much as it did. We were so frightened that we just stood there and didn't know what it was for awhile. My grandson was so frightened that he cried. They live in Phoenix, and he cried all the way to Phoenix. That night, he had a terrible night. I would appreciate if they don't come over the house. I don't know where their routes are or where they are supposed to go through; but it was so close. It felt like it was going to sit on top of the house. I don't know if it was the boom or whether it stopped there for awhile or if it was flying over the house. Thank you.

LT COL SWEENEY: Thank you very much.

(Translation by Mr Lewis.)

LT COL SWEENEY: Our next speaker will be Mr Joseph Juan.

JOSEPH JUAN: I would like to comment in my own language, then ask Mr Lewis to interpret.

LT COL SWEENEY: That will be fine, sir.

JOSEPH JUAN: (Spoke in Papago/Tohono O'odham language.) Okay. I'll just kind of brief what I went over for the Air Force personnel. I guess I have pretty much the same objections as everybody else. My first complaint is the real low flying aircraft on the Reservation. I happen to be from the Schuk Toak District, which is on the east boundary of the main Reservation, just past

67 Three Points, as the woman before me identified. I'm in the same area there. I've been noticing these low flying aircraft. Something was mentioned today about 3,000 feet. I don't believe that the altitude the planes were flying was that. I think they were flying below that.

A lot of this comment is sort of based on the past public hearing that we've had since 1979 with the Air Force personnel to express what damages took place concerning our Tohono O'odham people, our houses, our animals, and our children.

68 At the 1979 Hearing I was here when some issues came up regarding infants. Last month I had an opportunity to witness one of these incidents which happened to be my 10-month old daughter. It was in the afternoon. She was taking her afternoon nap when this happened and the planes came by. I didn't have time to measure the pulse rate, but to what I seen it was real high. The heart beat picked up tremendously. After talking to a physician at the hospital, I was told that in an infant tremendous heart rate or pressure, if it happens a considerable amount of times, the potential is there that the heart muscle tissues could be damaged.

If there is any way possible to work this out real soon it would greatly benefit the Tohono O'odham, especially our young youth and especially the infants. This concern has been brought up before.

69 The next thing that I just kind of briefed was the flight route over the Tohono O'odham Nation. Is there a set pattern that the flyer should follow? From what I've been observing it doesn't look like there is such a thing as a set pattern. When they come across on this side, they go different directions. Or maybe they follow whatever maneuvers they are supposed to follow, but I don't believe they follow them.

70 One of my main concerns -- I'm going to have to kind of apologize that I didn't have the time to go through the whole Environmental Impact Analysis process. I don't know if you state it in there, but what I would like to know is, what is our Tohono O'odham Reservation registered under the Air Force regulations? Is it a military flight operations, or are we registered in another category? I guess the reason that I question this is, because of my earlier statement regarding the 3,000 feet limit. For from my own point of view I have seen that it has been violated. That is the reason why I question that.

7) I do know that the officer that sort of made a few comments at the beginning of the hearing brought up a few issues that the Air Force plan to do and so on. If there is a need to, whenever the area of public relations is organized, maybe, for the Air Force benefit, it could establish a substation here, maybe in the central part of the Reservation here, and maybe from that point on to hear the people's concerns on a day-to-day basis. If there is an incident it could be investigated immediately or the following day and start working on damages, if there are any damages. This would also give the Tohono O'odham people the opportunity to come, individually, to the, if there is such a thing or if it is ever established, substation to put in their claims. As you know, we are way out here, and we don't have any kind of transportation. We don't have any bus routes, taxis, or nothing. Tohono O'odham does not have transportation.

I just kind of briefed over the Environmental Impact. A hearing will be done at Sells, and there is still a lot to be looked at. I just kind of mentioned that usually that happens when somebody writes a law or some kind of an ordinance. If it is an individual person, he or she would go and present it to a group of people. If it is a group, fine. The group goes and says "This is what we wrote." Like I said, some of the diagrams and information on there are not clear. This can be clarified by the people or the individual who wrote the Environmental Impact Statement. At this point, if they go to this and pick up whatever needs to be picked up at the hearing at Sells. That's all I have. Thank you very much.

LT COL SWEENEY: Thank you very much, Mr Juan. Our next speaker will be Mr Archie Hendricks.

ARCHIE HENDRICKS: My name is Archie Hendricks. I am speaking in behalf of the Nation and for myself. For seven or more years we have been living through this life of noise of the airplanes and sonic booms. Somehow our feelings are turning against whoever is responsible for this noise of the airplanes, which I hate to say. But I know it is the feeling of the whole Papago Nation that we don't like to have. Therefore, we would like to have all these noises cease. I have a home near the borderline, and it is an old building. It is not like the modern houses. Nowadays they anchor the foundation with steel rods. But that old house is not built that good. I've noticed lately it has been leaning. I had to brace it with rocks and cement. The Army planes go over that house every morning. I tell you, when I hear those planes coming, it

disturbs me. I hate to say it, but I feel like getting my rifle and taking a shot at them. I know you would not understand how I feel unless you are right there under it and see it every morning. Think about your house. For that reason I object to all you propose. It disturbs our land, disturbs our people, and distracts our houses.

The training they are having on our land is to kill other people when it becomes necessary. I don't think it is that much necessary to be preparing for battle. Because I read in the good book that it says that wisdom is better than equipment of war. I wish somebody would tell old Reagan about this, to gather up their wise men and think of a way, instead of fighting and equipment of war, to use their good knowledge. Thank you.

(Translation by Mr Hendricks.)

LT COL SWEENEY: Thank you, Mr Hendricks. Our next speaker is Mr Richard Ramires.

RICHARD RAMIRES: Good afternoon. My name is Richard Ramires. I'd like to make some comments, a criticism, and some observations regarding the over-flights and the Environmental Impact Analysis.

72 [First of all, originally, back in 1979, when the hearing took place here it was in regards to military over-flights, as I understand it. This particular document is in regard to supersonic over-flights. At some point of time there was some changes made in terms of this particular Impact Statement regarding those two. It is my understanding, because I have been involved in some of the discussions regarding the over-flights, that there are some designations of the over-flights and there is such a thing as a supersonic designation.

73 [The other is that I have had a chance to have a preliminary review of this draft document. One comment or observation or criticism is that this document does not really go into details of the cultural impact of this over-flight on individuals in regard to the culture and traditions of the Tohono O'odham people and the psychological impact on them. The claims process that the Air Force has established is limited to physical damage. Because that is the kind of damage that can be verified beyond reasonable doubt. It is very hard to have any other damage claims because of the need to verify the damage. Therefore, the burden of proof is on the Tohono O'odham people. As it is, they are already disadvantaged

financially, and I think in many other ways in the understanding of the paper work that is involved in the process. I also understand that the Air Force has been willing to provide this kind of assistance, but I have yet to see this. They have discussed the assistance, but I have yet to see what has been provided to the Tribe.

74 I have been involved in some of the discussions regarding the over-flight, and I mentioned, I've worked with and am an employee with the Tribe. My job takes me across this Reservation through Highway 86 from the east to the west and the Reservation up to the north. It is my understanding that there is a designated corridor for over-flights. I have, on numerous occasions, observed military planes off the course. I have experienced these military planes coming overhead, across the road, directly over me or in front of me. I've observed this on numerous occasions. For these reasons, my comment to the Air Force is that it is hard to have some kind of good-faith relationship because of these obvious infractions of understandings that the Air Force has discussed with the Tribe.

Over a period of seven years we have observed these infractions that we thought we had an understanding was not going to take place. So there are some of these things that I think the Air Force should consider, and I think that they have had seven years to try to show good faith on some of these agreements, if you may, to do some of these alternatives that we have discussed here in the Draft Environmental Impact Statement. I believe that these are some of the things that I mentioned that you are now again have been considering as alternatives. Again, we are discussing some of these, and I think that it is hard for us to accept these alternatives. Because there has been somewhat of an understanding that things were going to take place, and it hasn't taken place. Thank you.

LT COL SWEENEY: Thank you very much, Mr Ramires.

(Translation by Mr Lewis.)

LT COL SWEENEY: Thank you, Mr Lewis. Our next speaker will be Janice Felix.

JANICE FELIX: My name is Janice Felix. I'm from the San Xavier District. I'm also a member of an organization called The Defenders of O'odham Land Rights. We are interested to hear the

comments that are made by your people in reference to this Draft Environmental Impact Statement that was released by the Department of the Air Force.

I'm also concerned about the noise impact on our people. Some of my people have commented on this and how it affects them. Now, I would like to make a comment. If you were to put yourself in our position, as far as not being a member of the Air Force, wouldn't you have the same concern as our people if the same type of impact was going over your own property, your home, and your family?

75 [Also, the noise pollution in your Impact Statement here is -- the comments that I'm making now is -- I'm going back to Section 4.3.4, 4.3.5, pages on 4-9. Also on the noise pollution it is also listed in Section 4.3.6, 4.3.7, and information affecting on people and structures. I think on Page 4-18 it refers back to a study, I guess, that the Air Force made back in 1977. They were doing a comparison between an adobe home and a conventional structure. They indicated in the book that there is no difference between the structure of an adobe and a conventional structure on the noise from the--the supersonic noise. I just would like to know what do you mean by "conventional structure"? To me, I can't--well, the term "conventional structure" to me means a home, like in the city. I cannot compare that to an adobe home here on the Reservation. To me that would be a big difference. There would be more damage to an adobe as compared to a home in the city. But yet in the book it states that there is no difference of the impact from the noise. So that is information that I would like to know as far as what they mean by "conventional structure."

76 [The last thing that I do have here is, earlier in the meeting, I can't remember the gentleman who made the comments about studies being done on the effect of the people and the animals, but I would like to know how was the study done to determine the different effects on the animals and the people. Thank you.

LT COL SWEENEY: Thank you very much, Ms Felix.

(Translation by Mr Lewis.)

LT COL SWEENEY: Our next speaker will be Mr Eugene Enis.

EUGENE ENIS: My name is Eugene Enis. I'm from San Xavier District, located south of Tucson. I've heard quite a few comments here today that are very meaningful as far as to myself and I hope

77 → for you, coming here from where you come from. Many of the people here, or mostly all the people who are here and talking, making comments, are opposing this. I want to know from the United States Air Force, is this going to go on whether we oppose it or not? How much more proof do you need from the people here today opposing this project. We ask for extensions. We would like to have more extensions done for us for a project this big. I feel that there are a lot of things that are not in this report here.

You have heard some of the people say that there is a lack of culture studies; very true. I am a big believer in that. You have heard people say that there are many things in the environmental area that are missing; that is true.

I grew up on the Reservation, went to grade school on the Reservation. I do know of these sonic booms that you are talking of. I now work off the Reservation, but I live on the Reservation. I know what it means to come home, working in a busy world with the white man, next to the white man, to come back home to peace and quiet. I enjoy that. I hope that I can enjoy that until the day that I die. You white people, you non-Indians, you do the same thing. You work in the busy world that you are in. But still you go camping, fishing, into the mountains. You want peace and quiet, too. That is why we are here. We work on the Reservation and we live here. We are here twenty-four hours all the time. This is our land. You bring your supersonic jets over our homes when we ourselves want to relax. We have no judgment on that. You do what you want. But we cannot do what we want when we want it. I feel that that is a violation of our rights. As stated earlier, what if you were in my boots, and I was sitting on that side of the table where you are at? Do you know what it would be like to be cooking dinner for your family and have a jet go over, shaking your whole house and scare all your kids? Would you like that? I know I wouldn't. I would be very vocal, myself.

79 → Maybe this should have happened on this study all along. Maybe the group of you, who are sitting right here, should moved on the Reservation for six months to a year to experience this, without any air traffic changes, and feel what you have heard today as far as these comments. You may think that we are making up stories; I don't feel that. We take a lot of pride and honesty in our Nation as far as each other's word. Yes, there are probably many of non-believers around us, sitting here, saying "So what? It happened." That is just not so.

I feel that there are more studies to be done, more extensions to have on such a project here and to be looked into more thoroughly on the Tribal Nation level and, also, on your government level. I also ask Council members who are here today - We set up committees all the time, Council, in looking into different projects. Why hasn't the Nation's Council set up a committee to look into this for our future kids generations to come? The public meeting here was seven years ago, 1979. Are we going to be here in another seven years? Is this the only time we are going to meet with you Air Force, the United States Air Force, with this problem, this reason to meet? I feel that more negotiations should be going on and be dealt with as far as relations between Tribal level and the United States Air Force. It is in need, and I feel that it is too late. I have sit here today listening, and I feel that there is activity between the Nation and the Air Force. You have heard our Vice Chairman stand here before you as our first speaker and say we are for national defense. Yes, so am I. There is nothing wrong with that. But we do feel that we want our freedom and our peace and quiet, also. We are homely people; we are not radical people. We want to have peace and quiet just like you want peace and quiet on your weekends, to get away from the "rat race" that you live in.

80 [I also feel that for the cost of expenses for damages done to homes, nobody has yet talked about damages to physical and mental anguish. Who is going to pay for that? I think the generations of children yet to come are going to pay for that. Yet we sit here and we talk of our houses that are going down, the way they are getting messed up while so; c booms are happening all around us. Well, what about physical, mental--mental expenses? We sit here today probably asking why we have to be here today for this such and such a reason. Nobody has ever bothered us. We are always living the life that we want to on this peaceful land that the government has given us. Yet you, the government, comes back and says, "We want this right of way project to go through when we want it." When the Tribe needs something from the government, we have to wait months to years. That is the way the U.S. Government treats us. Yet when you want something, you want it done yesterday, because it is going to go on anyway tomorrow.

I feel, also, that many of you non-Indians that are here today have learned an education being here; I know I have. And I think many of you will go home now, wherever you come from, and you'll at least remember that we just haven't sat back and said nothing. We want negotiations with the United States Air Force. You are going to be around until the end of the world; so are we. Our

generations are coming up, also.

In closing, I would like to say thanks for giving me the opportunity to voice my opinion and have my verbal statements taken down. But I can't very well say thank you for me being here today, not for these kind of reasons. I'm speaking on behalf of myself and as a member of the Tohono O'odham Nation, formally the Papago Tribe. I hope that more negotiations will continue and better relationships will emerge between the United States Air Force and the Tohono O'odham Nation, because we are both going to be here a long, long time. It is time that we do something about this situation in this day, month, year, and century, for the benefit of generations to come and on behalf of your generations to come, also.

LT COL SWEENEY: Thank you very much, Mr Enis.

(Translation by Mr Lewis.)

LT COL SWEENEY: Thank you, Mr Lewis. Our next speaker will be Irene Maxfield.

IRENE MAXFIELD: (Spoke in Papago/Tohono O'odham language and then in English) I would like to say on behalf of the Vaya Chin Community that in December 10, 1983, when this incident happened, the sonic boom, it was in the morning, 7:00 or 8:00 in the morning that day. Two aircraft went over the Vaya Chin Community. It was early in the morning and most of the people were inside and didn't really know what was happening. All of a sudden, we heard this loud noise like a bomb fell over the community. The people were frightened, and they didn't know what to do. They either just stayed in their homes, or they ran outside to see what was happening. There was a friend that came by from back East to visit. He was outdoors at the time it happened. He was an ex-service person, and he knew more about the aircraft and how low they were flying at the time. I wished that he was here right now to tell you all the details about this incident. Because he was outside to see how low the aircraft was flying at that time.

But people right now are very concerned and upset over the whole incident. They are still trying to meet with the Air Force. They have met at the community several times, probably a couple or three times, to discuss what happened and all the details on anyone being injured, or how many people were injured.

Like I said, the community is still waiting on what the Air Force

81 is going to do now. Although they have filed a suit against the Air Force on the damages to the homes, there are 11 homes that are hut homes. There are about three or four other homes that are just the regular adobe structure, and a couple of homes that are made out of rock, rock houses. But still those houses were--they had broken windows. The hut homes are, like I already said, they had--when the aircraft went over, every one of those homes had broken windows. Some are the bigger windows, I guess, called "picture windows," the larger windows, some of those were broken. Some of them were bedroom windows which are a little smaller.

The Air Force had come down to check out the damages, the interior and the outside walls, which are all cracked. The interior, the plaster on the interior of the homes are cracked also. The nails that support are warped. The roof that is nailed upon the beams, the roof, they are all, I guess, you know, coming apart. They are all twisted and ready to fall off.

At the time this incident happened, when we met with the Air Force, and they said at that time they were--they were participating in exercises with the Air Force, Navy, and Marines that week and the day when this happened.

The community got help from Legal Service, from their office, you know, helping the residents to file a claim with the Air Force for damages. That's all, thank you.

LT COL SWEENEY: Thank you very much, Ms Maxfield. Our last scheduled speaker today is Mr Ceasario Luis.

CEASARIO LUIS: (Spoke in Papago/Tohono O'odham language.) (Translation by Mr Lewis.) Everything has been said. I just want to say about what happened in our Village of Vaya Chin. I was outside working on something when the sonic boom happened. It sort of ruined my hearing. I have seen the planes, but I didn't think nothing of them. But now since this incident happened, whenever I go out to gather wood, they fly over me, they circle around me, and it feels like they might drop something on me. I'm scared of them now. It seems like they flew over me every time when I was outside getting wood or doing something outside in the remote area. I would like to see some changes, to see them change the flights. I would like to see the officials help us change. Also, I would like to give our blessings to the Air Force officials that things will work out. That's all I want to say.

LT COL SWEENEY: Thanks to all of you for your comments. We will take a brief recess now of approximately 10 minutes. We will then return and give anyone who would like to an opportunity to ask questions of the members of the panel. They will attempt, as best as their knowledge permits, to answer those questions. If they are not knowledgeable enough to answer the questions, a written answer will be provided to you at the time of the final Environmental Impact Statement.

(Translation by Mr Lewis.)

(It was noted that there were approximately 40 people in attendance during this time.)

A recess was taken at 1647 hours, 25 October 1986, and reopened at 1715 hours, 25 October 1986.)

LT COL SWEENEY: We would like to get started again, please. As I indicated, we will be trying to move to the question and answer portion of this hearing. Before doing that, I would like to say that all of the members of the team thank you very, very much for all of you who took the time to express your heartfelt and obviously sincerely expressed feelings. I can assure you, once again, that all of your statements will be carefully considered by Air Force decision authorities, and that all of your questions, if we are not able to answer them here today, and even if we do touch on them today, will be more fully answered in the final Environmental Impact Statement.

(Translation by Mr Lewis.)

LT COL SWEENEY: Now, you have asked several questions during the comment period, and as we attempt to respond to your questions during this time of the hearing, I would just like to remind you that it is not appropriate for us to get into a debate with you or to argue back and forth about who is right and who is wrong. But we will attempt to provide information that hopefully will help you.

(Translation by Mr Lewis.)

LT COL SWEENEY: The only procedure that we would like to follow in this question and answer period is to ask that if you have a question, please, raise your hand, and once recognized, if you would move to any microphone that you prefer. The two in the rear there are operational microphones, or the microphone here in front

of us on the podium. At the time that you begin your question, if you would, please, just state your name and your address and perhaps your affiliation for the record, then please ask your question.

(Translation by Mr Lewis.)

82 JONAS ROBLES: I am Jonas Robles, Gu Achi District. Was there ever an official contract or an agreement between the Tribe and the Air Force?

LT COL SWEENEY: Let me see if we are able to answer that, Mr Robles. I don't believe any members of the panel were here, previously, when perhaps such negotiations were worked out. Unfortunately, none of us physically here today have the answer to that question. We will attempt to see if other Air Force official who perhaps have departed Luke or Davis-Monthan recall the substance of those negotiations, and a written response will be provided in final Environmental Impact Statement.

Are there any more questions? (No oral response at this time.)

COL RIVELY: As the senior Air Force representative here I would like to thank you for your statements, those of you who made them. Eugene Enis made probably the one statement that really is most relevant to what is happening today, and that is, we are both going to need to work and operate and live together in the area that we are talking about. That is what the EIS process is all about. For us, who have the problem of training the fighter pilots, where do we do that and how do we do that? And the way we do that and find out how to do that best is to have an environmental assessment of the area. That is why we welcome your comments.

The process is ongoing, and we welcome the responses that you made today and encourage further responses to be made as soon as can be, so that we can have as thorough an evaluation of what impact we are doing to you as we try to train our pilots for combat. That is the EIS process.

What we need to do, and it was brought up by many of the speakers today, is on a continuing day-to-day basis work together to solve the real time problems. Some of the instances that were brought up today about the noise can be corrected if we can get that information from you to us, and then we will move the low-level route or identify a no-fly area. That is what we do all over the

country, and it is what we need to do better here.

I was really encouraged by Eugene's comments that we have to solve this and work together. We can do that.

The point of contact that was brought up as a recommendation is what I see as a way to do that and to continue the dialogue that we need to have so that we can work together and not have to wait for the Environmental Impact Statement, for that process, to have us identify what the problems are.

We do have common problems, and they can, like all the problems before us in the past, be worked so that they are less of a problem in the future.

(Translation by Mr Lewis.)

LT COL SWEENEY: In case there is any concern by those who asked questions earlier and were not able to stay for the answers being provided, just a reminder. As I have tried to explain earlier, any question that was asked at any stage of this hearing will be answered in the final statement. So they will have an opportunity to receive a response to that question.

We want to now address a few of the questions that might still be remaining in your minds.

(Translation by Mr Lewis.)

83 → LT COL SWEENEY: One of the questions that was asked concerns the types of publicity and transportation for this hearing, the question of whether people received enough notice in order to be able to attend today. I will respond to that.

(Translation by Mr Lewis.)

LT COL SWEENEY: Prior to this hearing, both Air Force officials as well as the leadership of the Tohono O'odham Nation realized the difficulty in getting out the word to people spread through all parts of the Reservation. So a variety of means were used to try to pass this information about today's hearing. The hearing was publicized in newspapers. It was broadcasted over a local radio station. About 2,000 flyers were sent home with students at the BIA and the public schools. About 2,000 flyers were given to the members of the Nation for distribution. About 55 posters were made

for placement in the various villages throughout the Reservation. Finally, we, the Air Force, arranged for buses to go throughout the Reservation to pick up members of the Nation in attempting to make it as easy as possible for them to be here today.

(Translation by Mr Lewis.)

LT COL SWEENEY: One issue that has come up is concerns as far as how claims are handled, how they are processed, what happens if there is damage to a structure, or if another claim is submitted to authorities. You know that Ms Jody Roberson is a member of our panel, and she is in the Claims Office, at the Legal Office, at Davis-Monthan Air Force Base, in Tucson, Arizona. In a moment I will give Ms Roberson an opportunity to explain how that process works.

(Translation by Mr Lewis.)

LT COL SWEENEY: Ms Roberson.

JODY ROBERSON: In June of 1980, I started doing claims for Davis-Monthan Air Force Base, at which time I became familiar with the sonic boom claims and property damage claims from Sells and the local villages. After the first couple of times down here it became obvious that there was a need for explaining the claim forms involved and how to submit them to the Claims Office. During the following three years, I have received - by one means or another such as coming down here or through the mail - 12 different claims, all basically small for glass damage and property damage, which was "knickknacks." Those claims were processed and paid in the amount claimed. The 12 claims amounted to about \$800.00.

The incident in December of 1983 obviously resulted in a lot more damages claimed, and the claim files were received two years later, December of 1985. During the pursuing five and a half months we were attempting to come down and assess the damages and do the necessary reporting. During June and up through September of this past year, we did just that, assessing the damages and evaluating the documentation submitted. The claims were sent forward to Washington for final evaluation at the end of September. I expect that those claims will have a final decision made on them somewhere this late December or the very first part of this coming year.

(Translation by Mr Lewis.)

LT COL SWEENEY: Is there anything else, ladies and gentlemen? Is there anyone else who like to ask a question at this hearing?

VICE CHAIRMAN JOSE: I just would like to clarify something for my people in the sense that I think the 12 claims that were filed, you know, is fine, and there is \$800.00 that was paid out. But I believe that the incident with Vaya Chin, when we first addressed it, the Air Force did make the comments that none of the physical damage that was done in the magnitude that we expressed was readily accepted by the Air Force, and I think it was disclaimed. So it took the Nation and its people two years to compile that information because of fear and going ahead and addressing--I mean--by that I mean that the Air Force is readily able to address "knickknacks" and window damage, breakage, but I believe through Jody Roberson is not prepared to take care of any claims more that amount to more than that. I think, also, with the claims procedure that there are questions as to the "red tape," so to speak, for the people to follow that process. Although she is there we still have difficulty with that. I think Ms Roberson there is quite aware of some of the discussions we have had over that claims procedure.

So what I would like to clarify for the Nation and its people is that we have a number of other claims. I believe again we are frustrated with the procedure and the process and also the response from the Air Force. That's just a comment.

LT COL SWEENEY: I understand your comment, Vice Chairman Jose, and perhaps it is most appropriate for me to answer that.

Air Force officials are frequently looking at the claims process to determine whether it is being responsive to the needs of not only non-Air Force people, who suffer damage as a result of Air Force actions, but also Air Force people. They frequently receive comments from Air Force people that they are concerned about the process and how tedious it may be in putting together the claims forms. So that assessment is an ongoing one.

The second comment I believe I need to make, with respect to your comment, is that when claims are processed, they are filed in certain levels, certain monetary levels. The approval authority for that claim may not be here locally. When there is a very extensive damage claim that is alleged and investigated and is submitted, the approval authority is more likely to be at a higher level of the Air Force, perhaps at the Washington D. C. level where these claims have been forwarded for final consideration and a

final determination. That, unfortunately, takes time as each level must submit and review an investigation. We understand your concerns as to the burdensomeness of the process as well as how long it has taken. I assure you that Air Force officials will be also made aware of the concerns of the Nation in this regard.

85 VICE CHAIRMAN JOSE: I believe because of the concerns that the village in question, Vaya Chin, you heard from one of the residents that they have now filed a lawsuit against the Air Force for the damages. I think one of the last speakers, Mr Ceasario Luis, has now pretty much deserted his home because of some of the damages claimed.

LT COL SWEENEY: I understand, sir. Thank you for making that comment. It is very unfortunate.

(Translation by Mr Lewis.)

LT COL SWEENEY: Thank you. Are there any further questions by anyone present?

86 TONY FELIX: My name is Tony Felix. I'm with the legislative branch with the Tohono O'odham Nation. My question would be on the health effect of these sonic booms pertaining to our members of the Nation. I know there has been some studies in your package pertaining to the effects on non-Indians. But there has not been any studies done on the after effects of those sonic booms for Indians. Another thing that I wanted to address was the air quality. I do know that there are more flights now than there have ever been. So I was just wondering if there has been a change in the air quality in some of those patterns where your flight patterns are, especially those small villages where they are 87 surrounded by mountains? And the last one I want to address is, if there is an aircraft that is in trouble and it goes down, I want the Air Force to be put on notice that the Tribe is a sovereign nation, and they will exercise their sovereignty pertaining to the aircraft that is on the ground, even though it may be federal property. There has to be some kind of an agreement between the 88 two agencies pertaining to down aircraft. Because there has already been accidents that occurred on the Reservation, and the Air Force, or whoever it was in charge, came in and just really did a job on the land and the plants. So, again, I would like to put that in your gathering of information that the Tribe will enforce its sovereignty powers. That's all. Thank you.

LT COL SWEENEY: Thank you, Mr Felix. Your last comment is duly noted. I will ask Capt Taylor to see if he can address your first two questions. We will first have them translated by Mr Lewis.

(Translation by Mr Lewis.)

LT COL SWEENEY: I'll ask Capt Taylor now to answer Mr Felix's questions to the best of his knowledge. As I understand the first two questions, the first one dealt with the question of the health effect of the sonic booms, whether there are any studies in the Environmental Impact Statement, that is the Revised Draft Environmental Impact Statement, that deals with the possible health effects on the Indians as opposed to the non-Indian person.

CAPT TAYLOR: There are no studies in the Impact Statement on studies of supersonic effects on Indians.

LT COL SWEENEY: The second question dealt with the issue of air quality, whether the increased number of flights is causing some impact on air quality and has that been considered in the Revised Draft Environmental Impact Statement.

CAPT TAYLOR: Yes. In the Impact Statement we went back and calculated the amount of emissions that will be dropped out of the airplanes, from the exhaust of the airplane engines, for the increased number of flights out through 1999, and it will be a minimal increase. It is practically an unmeasurable increase. So the answer to the question is, there will be no significant increase at all.

LT COL SWEENEY: Thank you.

(Translation by Mr Lewis.)

LT COL SWEENEY: The next question that was asked earlier, I'll ask--excuse me. You have a question, sir?

JUAN THOMAS: My name is Juan Thomas. My address is Box 927, Ajo, Arizona, 85321. I live in Ventana. So far I've been here all day, and it sounds like something I say to my grandchildren when they don't listen or they do something wrong. It seems like the Air Force is in that position, and that is why we are here today to argue about it. It just goes to show me that sometimes we do something wrong, and we do not really work on it to see if it will be of some good or some use for the people as we know they are

human beings.

89 My question would be, since 1979, the first public hearing by the
90 Air Force was done, some of the questions may be the same thing as
today. What are the answers? Are they ever going to respond with
the answer to those questions? Since then has the Air Force worked
closer with the Tohono O'odham Nation on what they are doing on the
Reservation? Have they been contacted in everything that has been
done on the Reservation, or do they have a schedule for every
flight that the Air Force does on the Reservation? Maybe some
schedule could prevent some of the accidents on the Reservation
that may occur everyday. Some of the people will be ready if they
happen to come through on a low flight. I don't think this has
ever been done. That is why there was a lot of scare in the
villages. Some of these may be overlooked as just another training
for the Air Force, not concerning the Tohono O'odham people, maybe
the whole Nation. I think this should have been done in the first
place to correct this, then we would not be here today. Because
things like that should be worked out to where it would be perfect
and there would be no arguments. That is why I said the Air Force
reminds me of my grandchildren. When they do something wrong, I
try to make them correct what they were doing. But this is another
case where I would like to get response from the Air Force
whenever, or if ever, they start work on this next project. Because
I know for a fact that this is not going to be the last public
hearing that we are going to do on the Reservation. Thank you.

LT COL SWEENEY: Thank you, sir.

(Translation by Mr Lewis.)

COL RIVELY: Mr Thomas, before I reply, would you repeat what you
thought the Air Force should do that wasn't done since 1979? Would
you repeat what you thought the Air Force should do that would
solve the problem?

JUAN THOMAS: Like I said about my grandchildren, there is always
something that you can work out to correct a problem. There is
never something that you cannot do to correct a problem. The same
thing goes with the Air Force. If they see a problem occur they
can work on it to correct it. There is an old saying in the Tohono
O'odham Nation, "Work together, togetherness." That is what you
are supposed to be doing with the Tohono O'odham people to correct
the problem. Thank you.

COL RIVELY: Yes, sir. That is exactly correct. It is what we want to do. As the problems come up, you are absolutely correct, we can correct them. In the last couple of years, hopefully, we have taken steps to do that type of thing. Some of them were mentioned earlier about moving the low-level routes out of the Reservation area and identifying no-fly areas. But from the comments that were made today, we need to do more. If we have the dialogue, then we can do those things.

LT COL SWEENEY: I think the first part of Mr Thomas' question also dealt with what has the Air Force been doing since the last hearing which was approximately seven years ago. Perhaps the most knowledgeable person about the process, as it began prior to the 1979 Hearing is perhaps Capt Taylor. In a moment I will give him an opportunity to comment on that a bit, if he would like. Perhaps he could explain a little bit more about questions that were asked earlier, the question about what truly is the bottom line of the EIS, what is it really trying to get out, and is the EIS a complete document, or as complete as the Air Force believes that it can make it at this time.

We will have the translation, then I'll give Capt Taylor an opportunity.

(Translation by Mr Lewis.)

LT COL SWEENEY: Capt Taylor.

CAPT TAYLOR: Thank you. He has asked me to give you quite a bit of information. I'm going to try to go as slow as possible so that you are able to follow along.

During the public hearing for the 1979 Draft Impact Statement, your Nation identified several areas where you disagreed with our conclusion as far as to health effects, the number of sonic booms, the amount of low-level flying, and how much noise is being created. So during the past seven years what we have attempted to do, that is the Air Force has attempted to do, is generate the research we need to answer your concerns and your questions and to adequately describe supersonic flying, what takes place when our jets go supersonic, and what the effects are as far as the number of sonic booms and the intensity of those booms.

(Translation by Mr Lewis.)

CAPT TAYLOR: Those studies gave us information on the number of sonic booms that we were creating over the Reservation. It also gave us a lot of information as far as the effects of supersonic flying - sonic booms - on people, animals and structures. We also required a tremendous amount of literature review where we essentially went back and studied the works and studies of other scientists that worked in the field.

(Translation by Mr Lewis.)

CAPT TAYLOR: Those studies took about four to five years to complete, and then we had to analyze the data. Once we did that, we tried to rewrite the original draft, and that is why we filed a revised draft, to include the results of all of those studies. That is essentially what has taken seven years. That is what we have been doing for the last seven years to get to this point.

(Translation by Mr Lewis.)

CAPT TAYLOR: There has been some confusion indicated here today about the actual purpose of the document as compared to the purpose of the draft that was put out in 1979. The two documents looked at and analyzed the same situation. However, there have been some changes. In 1979, and the document that we just released, the purpose is to evaluate the environmental effects of our supersonic activities below 30,000 feet mean sea level.

(Translation by Mr Lewis.)

CAPT TAYLOR: In order to do a comprehensive analysis of the environmental effects of our activities, we don't just look at the effects of the supersonic and the sonic boom activity. We also had to look at the effects of all of our subsonic activity, some of which occur in high altitude as high as 51,000 feet mean sea level and down as low as the 3,000 foot floor. We also looked at activity along our military training routes which go down to an altitude, I believe, of about 300 feet.

(Translation by Mr Lewis.)

CAPT TAYLOR: We also looked at the activity of the A-10, which flies in what we call "low altitude tactical navigation areas," which are really not any predetermined or predescribed activity areas, but simply is a large block of airspace. That airspace goes to as low as 300 feet. So we did what we call an "accumulative

analysis" of all of our activities from the upper altitude down to the lowest altitude. We looked at the effects of all that activity on people, domestic animals, wildlife, and structures to try to produce as comprehensive of a document as we can. If there are areas that we did leave out - well, that is why we are here today so you can point those areas out to us, and we can go back between now and the final document and cover those areas to make sure every area is analyzed properly.

(Translation by Mr Lewis.)

LT COL SWEENEY: Are there any further questions?

(Translation by Mr Lewis.)

(No oral responses.)

LT COL SWEENEY: What I would ask all of you to, please, remember is that if you think of anything else that you would like to bring to the attention of Air Force officials before they put together a final document, please remember that you have until November 15th, 1986, to either mail or submit in written materials to be included in the transcript of this hearing. Those written statements will be fully considered and will be addressed in the final Environmental Impact Statement scheduled to be published in February of 1987. Once again, oral and written statements or comments will be afforded equal weight.

(Translation by Mr Lewis.)

LT COL SWEENEY: In conclusion, I would like to say that officials of the Air Force sincerely appreciate your efforts to come out here on a Saturday. We know how difficult that is and what a sacrifice it must have been for you to take the time to contribute your views to this public hearing.

Speaking on the behalf of all of the Air Force team members, we thank you for your courteous attention throughout this long day and adherence to the rules of this hearing. I remind you and assure you that Air Force decision-makers will carefully consider each viewpoint raised here today when deciding the ultimate course of action on this Proposal as to the matter of continued flight operations. Thank you.

Col Rively and the Air Force panel here will remain available for a

short period to informally answer questions while we are clearing out the facility, if any of you have questions that you would like to directly present to them.

(Translation by Mr Lewis.)

LT COL SWEENEY: The Air Force officials from Luke Air Force Base have graciously provided an evening meal and have made that available. Before you leave this evening, please feel free to partake of the meal which is available in the rear of the auditorium here. Thank you very much for coming.

(Translation by Mr Lewis.)

(It was noted that there were approximately 30 people in attendance at this time.)

The hearing was adjourned at 1807 hours, 25 October 1986.

REPORTERS CERTIFICATE

I certify that the preceding transcript was recorded by me with a closed microphone system and that the transcript is a true, accurate and verbatim account of the public hearing on the Draft Environmental Impact Statement that took place on the 25th of October 1986, at the Village of Santa Rosa, Tohono O'odham Indian Reservation, Arizona.

Betty Lange
(Signature of Reporter)

BETTY LANGE, GS-8, USAF

(Typed name of Reporter)

LUKE AFB, AZ 85309

(Typed address of Reporter)

STATE OF ARIZONA)
) ss
COUNTY OF MARICOPA)

Sworn to and subscribed before me this 17th day of November, 1986.

Phonetic J. Johnson
NOTARY PUBLIC

(SEAL)

My Commission Expires:
23 April 1990

AUTHENTICATION OF PUBLIC HEARING TRANSCRIPT

I have examined the foregoing transcript and have found it to be true and accurate.

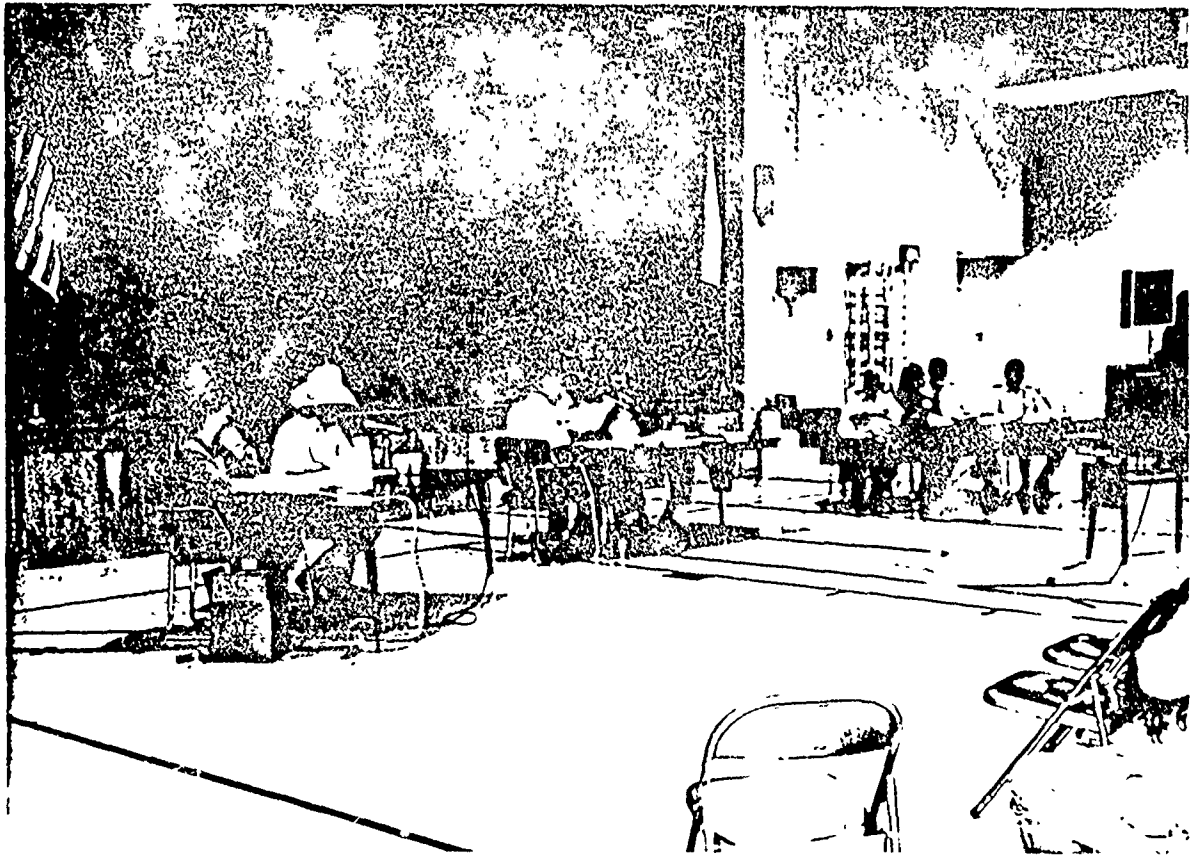
Howard P. Sweeney

HOWARD P. SWEENEY, LT COL, USAF
HEARING OFFICER
USAF TRIAL JUDICIARY
FIFTH CIRCUIT
TRAVIS AFB, CA 94535-6438



SELLS PUBLIC HEARING

Vice Chairman Francisco Jose speaking; KGUN-TV (Tucson Channel 9) cameraman; reporter Stephen Linn.



SELLS PUBLIC HEARING

(From left) Betty Lange, court reporter; Translator Mr. Lewis; SSgt Ron Woods, DM/PA; Lt Col Sweeney, hearing officer, Travis AFB; Col Joseph Rively, 58TTW/DO; Lt Col Richards, DM Airspace Manager; Jody Roberson, DM/JA; Major Lambert, Luke Range Sched; and Captain Ed Taylor, representing TAC/DEEV.

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**1.3 . PUBLIC HEARING TRANSCRIPT
(27 MAR 79)**

PUBLIC HEARING
on the
DRAFT ENVIRONMENTAL IMPACT STATEMENT
IN THE SELLS AIRSPACE
Held at
The Village of Santa Rosa
Papago Indian Reservation
on
27 March 1979

AIR FORCE REPRESENTATIVES

AT

PUBLIC HEARING SELLS AIRSPACE

Judge Advocate Presiding Officer:	Col William E. Cordingly Chief, Judge, 5th Circuit USAF Trial Judiciary Travis AFB, CA 94535
Head of Air Force Representatives:	Col Jeff W. Smith 12AF/Asst Dir Operational Plans Bergstrom AFB, TX 78743
Hq TAC:	Capt Bill Gauntt Hq TAC/DEEV Langley AFB, VA 23665
Luke AFB:	Lt Col Raymond Boucher 58TTW/DOE Maj Fred Kuhn 58CSG/JA Maj Bert Campbell TTL/OI Mr. Gene Cook 58CSG/DEEV Mr. Walt Brown 58TTW/DOIT
Davis-Monthan AFB:	Maj Frank Barrett 355TFW/DOTS Maj Jay Miller 355TFW/DOTS Capt James Beggerly 355TFW/DOTS Capt Charles King 355CSG/JA Mr. Bert Love 355 CSG/DEEV
Aerospace Medical Research Laboratories:	Dr. Charles W. Nixon Chief, Biological Acoustics Branch Lt Col Daniel L. Johnson Biological Acoustics Branch Wright-Patterson AFB, OH

ATTACHMENTS TO RECORD OF PROCEEDINGS

Photographs of planes flying over San Simon School and Map depicting locations, presented by Mr. Carpenter

Presentation of Mrs. Elizabeth Westberg, Tucson Branch, United States Section, Women's International League for Peace and Freedom

Memorandum, Southern Arizona Group, with enclosures, March 23, 1979

Letter from Mark Ulmer, Papago Legal Services, Inc., 30 March 1979

Memorandum, Mark Caldwell, Papago Legal Services, Inc., March 17, 1979

REPORT OF PROCEEDINGS

The hearing was called to order at 1040 hours, 27 March 1979.

COL CORDINGLY: Gentlemen, for the record, I am Colonel William E. Cordingly. I am the Chief Judge, Fifth Circuit, Air Force Trial Judiciary. I am stationed at Travis Air Force Base, California.

(Translation into the Papago language.)

COL CORDINGLY: I have been assigned the responsibility of conducting this public hearing on the Draft Environmental Impact Statement which has been filed by the Air Force with the Council on Environmental Quality.

(Translation into the Papago language.)

COL CORDINGLY: This Environmental Statement evaluates the impact on the natural and human environment existing in Southern Arizona as a result of military flight operations within the Sells Reservation.

(Translation into the Papago language.)

COL CORDINGLY: Before I proceed further, I would like to call on Chairman Williams to my left here to make a few introductory remarks.

CHAIRMAN WILLIAMS: (Spoke in the Papago language.)

REVEREND SERVISS: Let us pray. Our Father God, it is neither right nor proper that we should call you to come to us, but we pause for a moment in these deliberations to remind ourselves that we stand always in your sight. That all things that we do are seen by you and known by you and understood by you. Cause us, therefore, in these moments to be reverent before you as your humble children. You have bound us together through our Lord Jesus. Christ with the tender cords of love and compassion. We ask you now, Father, pull us closer together in real concern for one another. Bless us in our deliberations with your Holy Spirit and be with us, we pray, in Jesus name and for his sake. Amen.

CHAIRMAN WILLIAMS: Thank you very much, Reverend.

(Translation into the Papago language.)

COL CORDINGLY: My role as hearing officer in this proceeding is simply to conduct the hearing. My past experience has been judicial in nature, and I am not at all knowledgeable about the details of this particular project. However, we do have with us a number of people who are, and you will be given an opportunity later in this hearing to ask questions of those various representatives of the Air Force who are here present. I would like to point out that I will not be making any decision nor will I offer any recommendations to the Secretary of the Air Force. I have not participated in developing this project, nor have I rendered any legal advice with respect to the project.

(Translation into the Papago language.)

COL CORDINGLY: The purpose of this public meeting is really twofold: First, it is to provide you an opportunity to present your views to the Secretary of the Air Force on the environmental impact on your community which would result from the Air Force's continued use of the Sells Airspace.

(Translation into the Papago language.)

COL CORDINGLY: This permits the Air Force to receive representative samples of public opinion on the proposed action. Any of your comments will be considered by the Secretary, and such comments may be either verbal or written.

(Translation into the Papago language.)

COL CORDINGLY: The second purpose of the meeting is to provide you with a chance to receive information on the proposed action and to ask any questions you might have. This affords the Air Force the opportunity to try to clarify points. I would point out that the meeting is informational in nature. A transcript of the hearing will be used in preparing the final Environmental Impact Statement, which will be forwarded to the Office of the Secretary of the Air Force for use in the decision-making process.

(Translation into the Papago language.)

COL CORDINGLY: All oral statements and questions will be recorded verbatim by Mrs. Pat Owen, here at the end of the table, who is a fully qualified court reporter. Any written statements will be attached to the transcribed record as an annex.

I won't attempt to introduce everyone in the audience, primarily because I don't know very many of the folks; but I would like to take this opportunity to introduce Mr. Arthur A. Chappa, who comes from Congressman Udall's office. Mr. Chappa, I can't see you. Would you stand up, please? And of course, you all know Chairman Williams. I am going to put him on the spot because he hasn't had an opportunity to really mix in and see everyone who is here. But I would like to ask you, Chairman Williams, if there is anyone in the audience that you would like to identify for the rest of the group?

CHAIRMAN WILLIAMS: (Speaking first in the Papago language.) Councilmen, Councilwomen. Councilman Tony Felix, Councilman Cross Antone, Councilman Ed Kisto, Councilwoman Harriet Toro, Councilwoman Rose Mary Lopez (speaking in the Papago language), Mary Jane Narcho, Secretary. Mary June. Vice Chairman Max Norris. (Speaking in the Papago language.) Mr. Kenny, would you stand up. Is Miss Christman here?

(FROM THE AUDIENCE:) Not yet.

CHAIRMAN WILLIAMS: Okay. Thank you for the facilities.

COL CORDINGLY: It was bad enough that I almost strangled myself, but I did it in response to a message for Mr. Williams. (Laughter.) I would like to introduce Colonel Jeff W. Smith. Colonel Smith, if you would please stand up. Thank you. Colonel Smith is assigned to Headquarters Twelfth Air Force at Bergstrom Air Force Base, Texas. Colonel Smith is the Project Officer for the Environmental Impact Statement, and later this morning he will explain the purpose of our visit here today. Also with us this morning to assist Colonel Smith are several Air Force personnel and consultants from Headquarters Tactical Air Command at Langley Air Force Base, Virginia; Luke Air Force Base; Davis-Monthan Air Force Base; and the Aerospace Medical Research Lab at Wright-Patterson Air Force Base, Ohio.

(Translation into the Papago language.)

COL CORDINGLY: Now, the ground rules for this meeting are relatively few and simple. We are going to break the session into two--or the meeting into two sessions. In the first portion you will be given an opportunity to make statements; and there are three microphones out in the audience section, and you can get to the nearest microphone and make a oral statement, which will

then be transcribed into the record. Following that, we will then have the question and answer session, in which you can direct your questions to any of the Air Force representatives here present. I have not taken the names of those individuals who wish to make statements, so if you desire to make a statement, if you would indicate so by raising your hand, then Chairman Williams will call on you. Hopefully, we can accommodate everybody in the order in which they raise their hand, but because of the size of the audience, we will do our best, and if you get overlooked, why just keep raising your hand until you are called upon.

(Translation into the Papago language.)

COL CORDINGLY: Now considering the size of the audience, it will be necessary to put some time limitation on the individual presentations, and we have determined that five minutes for any individual speaking in his own capacity will be permitted, and any individual speaking in behalf of a group will be allowed ten minutes. Now, if there are valid reasons for having to go over that time, we certainly will consider it; but I would encourage you and request of you to try to keep your statements down within those time limits of five minutes and ten minutes respectively.

(Translation into the Papago language.)

COL CORDINGLY: Now, in making your statement I would also request that you break it into small enough sentences that the interpreters will be able to translate it for the benefit of the other persons in the audience.

(Translation into the Papago language.)

COL CORDINGLY: After your name is called or you have been identified for the next statement, I would appreciate it if you would go to the nearest microphone, and when you get to the microphone, please state your name and the name of any organization you may be speaking for.

(Translation into the Papago language.)

COL CORDINGLY: It would be very helpful for the news media and the court reporter if you would spell out any name or organization that you think might be difficult to spell. I would just request that you use your judgment in this area. If you think it would be helpful to the parties that I named, please do spell out such words though.

(Translation into the Papago language.)

COL CORDINGLY: Now, I would like to emphasize that this hearing is informal. This is not a courtroom and cross-examination of the speakers or members of the Air Force is not appropriate, nor would argumentative type questions or questions that are actually factual statements be appropriate. You will have ample opportunity to make statements later today before the question period.

(Translation into the Papago language.)

COL CORDINGLY: If you would like to present a written statement for inclusion in the record, you can hand that to me at any time during these proceedings. If your written statement is not yet completed but you would like it to be included in the record, you have five days from today to mail it in. Now, that statement should be sent to the 58th Combat Support Group/JA, at Luke Air Force Base. The address to which you mail those statements is contained on some little pieces of paper on this table in the front, right to the front of the assembly room.

(Translation into the Papago language.)

COL CORDINGLY: Now, you may also send written statements to arrive not later than 16 April 1979 directly to Dr. Carlos Stern, Deputy for Environment and Safety, Office of the Secretary of the Air Force, Washington, DC 20330. Again, his complete address has been placed on pieces of paper sitting up on the table in the front of the room, and if you desire to send in a statement, why do feel free to pick up one of those addresses.

(Translation into the Papago language.)

COL CORDINGLY: At this time I would like to call on Colonel Smith, the Project Officer, to make a brief statement. Colonel Smith.

COL SMITH: I think we all know that there has been a long history of use of the airspace here in Southern Arizona, including the Sells proposed MOA. It was about a year and a half or two years ago that we became very active in accordance with the National Environmental Protection Act, of drawing up the Draft Environmental Impact Statement, copies of which are available in the auditorium if you have not seen one. During that process we talked to a great many of you; we have negotiated a great many procedures which are reflected in this impact statement; and, as is probably usually the case of people who have done the work, quite frankly we feel that we have done an honest, thorough job. However, the purpose of this meeting today is to give you, the public, the opportunity to make your comments on that statement, just to assure that we have not overlooked something which is important to you and to make sure that we do consider it before we go final. And having received those comments, we certainly will consider them; we will give you answers, as was indicated earlier by Colonel Cordingly, and your concerns will be considered before this Impact Statement is filed as final and the answers will be incorporated.

COL CORDINGLY: Thank you.

(Translation into the Papago language.)

COL CORDINGLY: Before I invite statements from the floor, I would like to introduce Major Fred Kuhn. He is the Staff Judge Advocate at Luke Air Force Base; sits here. Thank you, Fred. Major Kuhn will act as the administrative assistant for this hearing. Among other things, he will keep track of the time, and I would appreciate it if the speakers would watch him, and Major Kuhn will stick up his hand and indicate to you when you have one minute left to speak.

(Translation into the Papago language.)

COL CORDINGLY: Now, despite our late start this morning and the size of the audience, I would like to assure you at this time that everyone who has anything to say will be given an opportunity to speak. So, if need be, we will continue this session late into the evening or we could run it an additional day if necessary.

(Translation into the Papago language.)

COL CORDINGLY: Now, finally, I would again ask you to be sure to give your full name, address, and the name of the organization, if any, that you are representing. And again I would ask you to keep your individual presentations to five minutes and if you are representing a group, keep your presentation down to ten minutes.

(Translation into the Papago language.)

COL CORDINGLY: Do we have anyone who has a statement?

(INTERPRETER: Speaking in the Papago language.)

CHAIRMAN WILLIAMS: Benito.

91 [BENITO GARCIA: (Translation from the Papago language.) Benito Garcia started out his speech by identifying the problem that he didn't know when those flights over the reservation started, but he is aware of one problem that he is experiencing now, and that is whenever the sonic boom goes off, it gets to his heart, where he is bothered by emotional problems. You know, it scares him, and he believes that this is a serious problem because a man is made to live in his own environment, at peace. And here these sonic booms upsets the condition that he is living in. And he brought out that the respect for our lives, the same as any lives, either be the white man majority or what, that we as Papago people are experiencing problems from these sonic booms. And he brought out some incident that occurred in the District of Hickiwan where he is originally from. He mentioned the problem that whenever the sonic boom goes off, it breaks the windows in the houses, cracks the homes of the people that live in that area, and even to a point that he is scared. One child to go into a coma, for a length of time he just stared into space. And this he believes is a serious problem relating to, you know, the life of the people, even the children. A young child is born, is sleeping, and the sonic boom, a tremendous impact, the way it sounds, and it shakes the house and dishes or whatever, you know, that is inside the house, and sometimes they fall off the shelf. And we experience this. And he believes that, you know, it isn't right that these things are happening. I think if we were in that environment, you know, in that position where we live, I think we have a right to explain, you know, to complain about it. And he also brought out an incident that a man was riding in a wagon and he was going someplace and the sonic boom scared the horses, and it threw the man off the wagon and hurt, injured this man. And I understand, too, in the information that was relayed to the District, that this man was compensated for \$40, and here he is still going through that injury that he experienced from that fall. And the man is still living now. That \$40 will never bring back, you know, the amount of suffering that this man is going through. And these are just some of the things, you know, that we are experiencing here on the Papago Reservation. He said we see this problem and it's a serious problem, but who do we turn to, how do we solve this problem? Some time ago we started looking into this problem and we had meetings with the Air Force at Luke Air Force Base and there was a lot of things that were discussed, and there were commandments that were made that was never followed through. And I sat in on these meetings and I have a letter, statements written on there what was supposed to be happening, the agreement, like the villages within the areas mentioned were Vaya Chin, Quijota, Sells, Hickiwan, Gu Vo, that these would be eliminated from the, you know, the flights would be eliminated from these areas, but it's still going on. Benito also mentioned homes; you know, we build our homes out of adobe, and some times cactus ribs and ocotillo, and he said long time ago these homes would, you know, last for a length of time. Now, sonic booms destroys these kind of homes that are built. He said we who are here today should all get together and bring out our problems, and maybe this way there could be an understanding from our point--from their point of view what we are trying to say. He mentioned we are the first people here in the country, but it seems like we've been--it seems like in everything that we've tried to do or try to ask for for our own welfare, a lot of things hasn't been followed through. I think it was, a good idea, you know, the first time that we had Thanksgiving, where there was a sharing of food when the first white man came aboard. And he believes this was something very precious, very good, because that was the way the Indians lived, that was their way of life. And it was good that the white man taught us their language, but then a lot of agreements, treaties began to be broken, where the government had promised to look after some of these benefits to our people was broken one by one. He said God is the creator. He made man and this is where he put the Indian, and the Indian live the way of life, but up to this point there has been a lot of problems because a lot of things that we learned from the white man became a serious problem in

our land. He said that long time ago we had no courts, no police. Why? Because we were a peace-loving people. We didn't need courts; we didn't need police to protect us. We were very close to each others. But now things are very different. We are fighting each others. And he is pleading to you people to please listen to him. He is scared of those sonic booms. To give him--to hear what he's saying and try to help him. That's all.

CHAIRMAN WILLIAMS: (In the Papago language.)

JOHN PANCHO: (Translation from the Papago language.) The man that was up just now, his name is John Pancho from Gu Achi Village. Gu Achi is spelled capital G-u capital A-c-h-i. He just wanted to say that the things that Benito Garcia had talked about are true, how the planes come in low, they make a lot of noise. And for some of the people, as himself, that the doctors have told him that he has a weak heart. He doesn't believe them, but now that when he hears these noises, and as Benito had pointed out, when these sonic booms happen there, it disturbs the rhythm and the heart itself, and from that he has concluded that it does--that he does have a weak heart. And also he talks about his hearing, that he also has some problems with his hearing, because there is a constant ringing in his ear. And he says that it may be due to the noise that the planes make when they come, they come in low. He has seen the doctors and they cannot explain to him why, or what has caused this ringing in his ear. And the, they know, they have told him that the ringing in his ear will go on until, until he dies. They also know that it doesn't hurt; it's just that it's constant. And again, he did say that from the noise this is when a lot of the problems, both his hearing and his heart are, you know, are disturbed. He would like to see something done to do away with this. These people, and they are referring to the Air Force personnel that are here, to listen, hear what he has to say and to do something about it, look for some other place to fly over and not over us. And that the, everything is disturbed by these sonic booms, even the dogs. They cry and go inside. There has been a lot of bad things from that, from the sonic boom, and he says that I want them to do something about it and help us. He said that because we are the first people on this earth, this land is ours, and the white man took it away and all of this is ours and that when they, they meaning the white man, took the land away, from that they try to, they act brave and smart and they say that they will give it back to us, but they don't. And that's all.

MARIE LEWIS: (Translation from the Papago language.) The lady's name is Marie Lewis from Vaya Chin Village. Spelling on that, I guess, is V-a-y-a separate word, C-h-i-n; mailing address Box 820, Vaya Chin Village, Ajo, Arizona. I just wanted to say that it's true, all the things that the people have said that have spoke before. She wants to tell the Air Force here that, you know, the same thing basically what the other people have said. She sees this as the planes that fly over the reservation, she calls them, they are the roads for the planes, and that they destroy a lot of things, and in her own particular case that when a sonic boom near her place there, that her roofing fell, or cracked and fell in--what's that?(a sound of a bell occurred in the hearing room). We are not alone, or something. (Laughter) The other thing from that is that she hurt her head and have gone to see the doctors, but they can't be able to find anything wrong, except that she has said that, constantly that she doesn't feel right at all. And this happened two years ago and it still, and me, and her health is still the same. She also says that it's true that what's been said already, that the sonic booms scare not only the people but also other living things. They have scared off the deer, which in her area is a source of food. The men go out and hunt, but can't find any. The same is true with the rabbits and the javelina, are also scared off and the men can't find any when they hunt for them. It's the same with the birds. And the way she was saying is that you understand that the birds talk amongst themselves, and that in the mornings when the vultures begin to talk, that they don't see that any more,

they don't hear that any more, whereas before, that when they start talking, everybody knows that it's morning. And the same way with the doves. All of these animals that are mentioned have been scared off, so now it's quiet because there's no more birds and that kind of noise in the morning. She also brought out that in the Village of Kaka that when the time of around November, they have their ceremonial dances, and part of that is to, they kill off some deer to eat, and usually before this started, that they would go out and hunt and bring in about four or five and feed on that; but now the men when they go out, they can't find them, and some times they only come back with one. So all of that is gone now, because they have been scared off. And the last thing that she talked about is that it's true that it was mentioned before about that a lot of the problems come with the, on children, the smaller, the infants, when they are born and these noises go on, then it scares them and it just, you know, ruins them I guess in some way or another. And that's all.

TONY FELIX: (Translation from the Papago language.) The man that was just up here, his name is Tony Felix from San Xavier, and he is also on the Papago Council. He started out by saying that the problem of the sonic booms are not, they do not have that problem in San Xavier as it is here. During the past year that he has been working on this part of the reservation and now sees, has seen this problem of the planes flying low. The path of the flights that come over starts from over Sasabe, going across by a village named Pan Tak over to Santa Rosa Peak and across to Ventana and down through Gu Vo and Papago Farms. He also stated that being on the Council that they were asked to look into some of the mines that are on the reservation, both patented mines and unpatented, and since these mines are located in remote areas and they go out physically to check on them, that they also see that the planes sometimes come in real low. During the past year that since he has been working his job as a driver, truck driver, and sometimes towing a lowboy with a tractor, and it seems that those planes that come by are just playing, playing games to see how low they can fly over, over him. He also says that it's scary, it feels scary, that not only for himself but also stated that one day that it will hurt somebody, because if anything should go wrong with the plane, then it would come down and either land on him or other people. They have gone, a delegation from the Council has gone to see the people in Washington, D.C. about four years ago, and have talked to the people at the Pentagon, himself and also Ed Kisto and Rose Mary Lopez. Along with them was the Tribal Attorney, Mr. Strickland. Their purpose for the trip was to go and talk to them about if they could ease off on their, on these low flights. It seems that since it has been established that it has gotten worse, instead of flying higher, they are flying lower. The politics between the white people here, or in Washington, they play the games among themselves that we cannot, we cannot do anything about that. The pilots using the land space area over the reservation for their flight training, and that part, I suppose, is what he meant by saying that we can't do anything about that. You people, the Air Force personnel that are here now, that you are not, you are not high enough in the structure. It seems that however long that people will talk, he says that you probably won't hear from everybody. He also disagrees with the time limit that has been set on each speaker. He also cited the crash that happened in Tucson not too long ago, and it seems that when there was an uprise from that, from the white people in that area, that it did not take very long to resolve the problem. He also said that what we should do is to take this matter to court and that's his feeling. And also again pointed out that the time given to people here is too short. And then the last thing that he said was that we are not recognizing people with their hands up, and that his suggestion is that instead of holding your hand up, that you just come up to the top. His own comment on that is that we can't see. These lights that are here and we can't see. I'm sure you noticed that. We can't see. Now it's okay. It's a lot better. And that's all.

CHAIRMAN WILLIAMS: We have a person here that needs to return back to the school in San Simon, and they are having a serious problem down there too, and he would like to bring out some of the problems. Dr. Carpenter.

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MR. CARPENTER: Thank you for the title, Henry, but it's Mrs. Carpenter that is Dr. Carpenter. I'm here to speak for a large number of the staff at San Simon School, and our primary concern has been the extremely low flights that occur with acrobatics directly over our school. We have a water tower out there that's very similar to the one here at Santa Rosa. We have observed planes actually flying below the top of that water tower. You could almost make out the pilot's features in the plane. We have had planes fly directly over the school buildings, do flips, steep dives, all the things that these low-flying planes do. These are done directly over the school and over the housing, and we are concerned about the lives of two hundred helpless children that are in those buildings and can't even see what's happening. They won't have a chance if anything ever goes wrong. The noise has always been a nuisance. I would like to remind Mr. Ulmer briefly about some meetings that we attended about this time last year, I believe it was, when we were assured by an Air Force Colonel, and I believe even some of these gentlemen that are here today, that corridors would be established and that the Air Force planes would fly in those corridors and never get closer to a school or village than five miles. This portion of that agreement was never kept. At the same time we were assured that planes exceeding the sonic limit or what-have-you would attempt to do so farther from the school. This was after one child was almost knocked off the stage by a blast, a window was blown in, ceiling tiles knocked. An Air Force team came out, investigated the building for structural damage, and for about three months it was quite quiet. And now the problem is worse than ever. I was told by one of the gentlemen from the Air Force a while ago that they just couldn't control those young pilots, and I strongly would urge that the Air Force find some way to keep these airplanes away from our school and all the other schools on the village. I don't think it's fair to children. Without elaborating on the disturbance to the learning environment of sonic booms, just think about it yourself, if you were deeply involved in reading a book and someone fired a shotgun three feet behind you. These children have a difficult time learning English. They need all the concentration and help that they can get. This doesn't help at all. Again, we request that you keep your planes away from all school buildings. Thank you.

(Translation into the Papago language.)

COL CORDINGLY: We will recess very briefly for lunch. I understand there are some food vendors right outside of the school. I realize there is a large crowd and it may be difficult to get your food real fast, but we would like to reconvene in here at 1:30.

(Translation into the Papago language.)

The hearing recessed at 1237 hours and reconvened at 1330 hours, 27 March 1979.

COL CORDINGLY: Ladies and gentlemen, if you would be seated, we are about ready to proceed.

LT CMDR SELDON WASSON: I am pleased to have Commander Seldon Wasson. I have been stationed at the U. S. Public Health Service Hospital in Sells, Arizona since August of 1975. By vocation I'm a physical therapist; by avocation I'm a pilot, holding a commercial pilot's license with instrument in multi-engine rating and a Certified Flight Instructor's License. When my wife and I moved here, we found Sells and the surrounding area to be a very peaceful, friendly, quiet, enjoyable community in which to live, and we still find it that way. However, shortly after we arrived here, we began to notice the increasing frequency of sonic booms that were occurring over the reservation--something that we were told had been occurring, but it just took

us a little while to become aware of them. This, of course, changed how peaceful things were. Over this time since then, the amount of booms have increased and decreased periodically, according to a number of different factors, but by actual count I have at some times counted as many as 12 to 15 a day over Sells, and I'm not talking about the ones that rumble like thunder off in the distance. Because I work in the hospital, I'm inside most of the time and so, therefore, I do not hear some times a lot of the ones that occur. And I know this for a fact, because people have asked me some times, "Did you hear that boom?" And I say, "What boom?" and then they tell me when it occurred, and I was inside the building so I didn't hear it. So, of necessity, then, the ones that I'm aware of inside the building have to be of fairly large intensity. The effects that we find inside the hospital are very annoying, the primary one being the startle effect, which I jump and the patients jump and my notes get scribbled. And I've never yet had anybody fall off the table, but some people have stumbled. We also have large heavy wooden doors with hydraulic closures, and I have seen them, when the boom comes, when the shock wave comes down the corridor, actually move an inch to an inch and a half and then slam back against the frame, causing a very loud noise. We also have fire doors that are held open with electronic holders, and on occasion I have seen these jarred loose, even though there was no interruption in power. For those gentlemen on the stage that have been--oh, excuse me.

Many of the patients have commented to me several times after these have occurred, that, you know, why does this happen; and I have to tell them I don't know. They are sonic booms; I don't know why they are doing it over the hospital. And they have indicated--probably 50 percent of my patients that I have been dealing with at this time have indicated to me their annoyance to me when they occurred.

Besides these effects occurring to my patients and occurring to the other patients in the hospital, there are some personal effects that I have experienced. For those of you gentlemen on the stage who have been stationed in the Philippines, you know what a Capiz lamp is, and on a recent occasion I've had--I have three of them--and some of these strands of Capiz have dropped as a result of the booms, and they dropped as the boom occurred or just a split second afterwards, so there is no mistaking what the cause was. Fortunately, it didn't break, since it would be a little hard to replace it. Also, one of our lithographs was jarred loose. I observed it sliding loose from its mount inside the frame. The picture did not fall off the wall, but the picture within the frame dropped loose.

However, the most annoying personal effect has been alluded to by Mr. Pancho and several other people today, and that is what effects it has on the animals. I have a dog, my wife and I have a dog, who is a very close member of our family. He is our family, as a matter of fact. And until we moved here, she exhibited the normal behavior of any other dog. But since this time, the only way I can describe it is to say that she has become neurotic. When the booms occur, she will put her tail between her legs and move to another spot in the house trying to avoid whatever it was that startled her, and this has gotten worse during the time, to the effect that when my wife and I are out of the house, we have come back to find the usual expected mess, but also we have in our government quarters four doors that will have to be replaced when we move, because she has clawed on them and chewed them up to such an extent that there is no way that anybody else would accept the quarters with them. And I assure you the Air Force will get the bill for those when we move.

Now, the Air Force has said that they want to know when these things occur, and that's fine. But out here there are a couple of problems involved with letting you know when they do occur. The first one being trying to get

through the bureaucratic red tape. How in the world do you find who you are supposed to contact? The average person, if they are not familiar with the government system, wouldn't have any idea where to call. Since I am familiar with the system, I have some idea of who to call, and so I started keeping a log of these booms starting about last November, since I was just getting annoyed enough with them, and I have called Major Campbell and he and I have had dialogue on several occasions about these booms. But the average person doesn't know where to reach, how to get a hold of you folks. Getting a hold of you also presupposes that there is access to a phone. Human nature being what it is, most of us won't sit down and write a letter when it occurs, so the next best thing is a phone. Well, I don't know the exact number but the number of phones on the reservation are very, very few. Most people have no access to them, and when they do, oftentimes they don't work. The phone system on the reservation is very antiquated and according to testimony of a friend of mine who works for the Telephone Company, they would sooner that the system didn't exist, because they are getting tired of servicing it.

So these are some of the problems that we have in trying to reach you, letting you know when they do occur.

Commenting, just one last comment about the low-flying aircraft. I know from having, from a briefing that I attended at Davis-Monthan about a year or so ago that there are no, are supposed to be no low-flying aircraft conducting terrain-following missions that are to be flying south of Highway 86 by Kitt Peak, yet my wife has observed them there on numerous occasions, and at some points where the road rises and the terrain slopes away from the road, they have been flying at the same altitude as the car, so she could look straight across and see into the cockpit. Unfortunately, she couldn't read the tail numbers, but they have been there.

These are a few of the problems that I've experienced. Thank you for letting me voice my opinion.

(Translation into the Papago language.)

CHAIRMAN WILLIAMS: Jose Emanuel.

JOSE EMANUEL, JR: (Translation from the Papago language.) The person that was up there is Jose Emanuel, Jr., and he resides in Pisinimo District. He mentioned about the comments that the other people before him had made. They were the similar comments, you know, the problems. He also mentioned that the person mentions the areas, the villages that these sonic booms were affected by the planes, but he didn't mention Pisinimo. But the people that live there are aware of the problems, the experience that they go through, you know, from the sonic booms. He said at one time it was mentioned at the Council meeting, the Papago Tribal Council meeting, and the Council discussed about it and because somebody that was supposed to listen to them and do something about it, but everything that they have said, there was no results that came out of there; that the man said that the training was for, was important because it was, you know, the training was for the defense of the country during the time of war where there's no way, you know, I guess it's relating back to, you know, defending people on the reservation also, that these people have to be trained. But then there was a question that why don't they train elsewhere, like way down in Rocky Point over the ocean, where, you know, that nobody would be affected by it. But then again the man said that it was too far away and every time that one boom takes place, it relates back to the fuel, that absorbs a huge amount of fuel. And the second, sonic booms would probably really increase, decrease the fuel which, you know, the plane wouldn't make it back to the station. And all these points that were brought out that nothing, there was no results out of this. He also mentioned that there was an old man going to Tucson, near Tucson, and he saw a plane flying up there, and he questioned why, you know, that

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plane didn't make any noise, sonic boom noise, and maybe the reason was because it's near the town of Tucson, and probably relating to that they would make negative comments about it. I guess he's just trying to relate back to, you know, if it's on the Papago Reservation, nobody cares, you know; they could make all the noise they want to, the sonic boom noises. And he said and now it's getting worse and they tell us that, you know, every time we see something damaged that we should write down and in a month or two somebody will be coming around to do something about the damage, I guess, compensate; but so far there hasn't been anybody coming around to look into the damages that the sonic boom has caused. And he said that he too pleads to the Air Force that, you know, to do something about the problem and stop the flights over the reservation. And he also said that he hopes that all the people would get together and make comments about it, and that way we might have an impact on what we're trying to say here. And that's about all.

ROGER RAMONE: (Speaking first in the Papago language and then in English.) In other words, I said, I will explain it in English now. At one time I said, okay, one time I took this and I told them, you know, in my own, you know, in my own words, you know. They told me to go down to Davis-Monthan Air Force Base to get my windows fixed, you know, from all this and that. Okay, what did I see? This was a year ago. I never seen nothing from them, never; I never seen nothing from them. Okay, this is the same way. Okay, you write all this and that. Okay, when you get home, you throw all these papers away, you know. Whatever you're writing, you never see anything from that. You just throw it away and forget about it. Okay, there's always a person that's always thinking about it, but you don't think about it. You just take and say, "Okay, forget about this persons, you know." You never try to take care of it. They think we don't remember, but we always try to remember them things. And they say, like I said, you know, like I'm going to say it again: One time, it's about over a year now, windows all busted in my house. Okay, what happened? They never fixed it. They want, oh, sure, they want me to fix it myself and they want me to send a receipt out there. Okay, then, what happened? They never did fix it again. So, okay, then, what can I say? Nothing. I seen them windows shattered all over two places there. And so whatever you're writing up there you'll probably forget about it again, you know. That's all I'm going to say. I got some windows over there. My name is Roger Ramone. I live in Ventana Village. My name is Roger Ramone; I live in Ventana Village. I got my windows all shattered; seven windows I got shattered in my windows by them planes. I never got them fixed. I got plywood boards on my windows 'cause of them. I never got them fixed. That's all I'm going to say. That's it.

DELBERT PEDRO: (Translation from the Papago language.) The gentleman that was just up here, his name is Delbert Pedro from Ventana. He was saying that, again, that most of the people that were up before him, the older men, the elders, what they have said is true about the disturbance that it causes for him and everybody else. He sees these planes come low around Ventana where he lives; it comes low enough that he can see the pilot's face. He doesn't like the Air Force people that are here today because of, especially--and he makes reference to Colonel Cordingly--that he doesn't take this seriously, and the only thing that is happening today is that he is writing this down, but by the time that you get back to wherever he came from that he'll probably throw it away. He has seen the damage that has been done to other people, and that he himself is trying to build a house but, you know, with the sonic booms, you know, it just keeps, you know, destroying it as he goes up. It takes a long time to try to build a house, and the sonic booms are so loud. He is also concerned with the children, the young people in this reservation, and he references his own, his own children. There is a school in Ventana--Vaya Chin, sorry about that--and he has three of his children that go there; and the planes

94 [come over the school and he doesn't want that to happen any more. He's afraid that when, if the plane should fall to earth, then it will kill off his children, and then what will happen then? Will the Air Force then do something, you know, to ease that pain? He also made comments not to fly over the villages, but to fly over the mountains, so then at least if it falls to the ground, it won't hurt anybody. The comment, he makes a comment that he's, you know, that people, the planes fly over the villages but they never seem to fly over the towns and the cities, such as Tucson or Phoenix. You never see them flying over Tucson or Phoenix. If they have to practice their training flights, not to do it over the villages, and stay in the mountains. He doesn't want planes flying over Ventana, and go fly somewhere else. That's all.

ELOISA SAM: (Translation from the Papago language.) The person that was up there, her name is Eloisa Sam and she is from Ventana, and she is one of the village representatives within the Nickiwan District. She too had experienced what the sonic boom done to her home. Five years ago somebody came around to have the damage written up, and she felt at the time that something was going to be done about it, but so far nothing has resulted from the information that was taken up. She also mentioned the church there at the village that had cracks from sonic booms, and it has gotten worse to a point now that the water is just running into the church. And people are trying to repair it, but it has gotten so bad. And she stated that what we're saying here maybe doesn't seem realistic to the Air Force sitting here and listening to us making these comments; that maybe that they should go out there and actually look at the damage that they have caused, and maybe that way they can be more aware of what's really happening. That was the last comment that she made, again that she feels that what we are saying here, you know, the Air Force might be hearing it, but still, you know, not really aware of the problem. That's all.

EMILIO FRANCISCO: (Translation from the Papago language.) The man that was up there is Emilio Francisco, and he's from Kaka. He just made a comment that the person before him had repeated the same thing that he was going to say, but he related to a question that somebody asked, who's going to pay for the damage that...

(Interruption from the floor in the Papago language.)

(Translation continued:) He again asked, you know, who's responsible...

(Interruption from the floor in the Papago language.)

COL CORDINGLY: Ladies and gentlemen, as I previously indicated, this meeting will be broken into two parts. In this first part you have the opportunity to make statements; in the second part you have the opportunity to ask questions, and we will not respond to any questions at this time.

(Col Cordingly's remarks translated into the Papago language.)

CHAIRMAN WILLIAMS: Do you want to make a statement?

ELIZABETH WESTBERG: Mr. Cecil Williams, Tribal Chairman of the Papago Tribe; Representatives of the Air Force of the United States of America; Representatives of the Federal Aviation Administration of the United States of America, whom I understood were to be here this morning, and if they are I address them; and fellow Americans of the Papago Tribe. I am Mrs. Elizabeth Westberg from Tucson, Arizona. I am here to present a statement for the Tucson Branch of the United States Section of the Women's International League for Peace and Freedom. I think I'll start over. I am Mrs. Elizabeth Westberg of Tucson, Arizona, here to present a statement for the Tucson Branch of the United States Section of the Women's International League for Peace and Freedom, which has its national offices in Philadelphia, its legislative office in Washington, D.C., and holds consultative status as a nongovernmental representative at the United Nations in New York. The international offices of the twenty sections on five continents are in Geneva, Switzerland.

Copies of this statement with identification and credentials of the Women's International League for Peace and Freedom will be left with you.

This statement of the Tucson Branch of the Women's International League for Peace and Freedom speaks to the constitutional, moral, and a few historical aspects of the confrontation to be resolved. For 62 years since World War I, the basic purpose of the Women's International League for Peace and Freedom has been to work for peace, freedom, and justice throughout the world. We believe peace is more than the absence of war...

COL CORDINGLY: Excuse me, Ma'am ...

MRS. WESTBERG: I beg your pardon?

COL CORDINGLY: Does your statement relate to the environmental impact of air operations in Sells airspace?

MRS. WESTBERG: This definitely relates to what the Indians are presenting to you today, and I'm giving an introductory statement. It will get to what they are concerned with very soon.

Peace is a positive principle of human relations. It can be found or created only where there is free cooperation for the common good of all peoples. Peace has been an American patriotic ideal from the conception of our form of democratic government.

In the hearing today the Papago tribe is asking for their American citizens' human rights to have peace in their lives, on their lands and over their lands, and that their rights, hollowed by the Declaration of Independence be honored, and we can't say these words too often. We hold these truths to be self-evident, that all men are created equal, that they are endowed by their Creator with certain inalienable rights, that among these are life, liberty and the pursuit of happiness.

The Papago Tribe is asking too for their basic freedoms and civil liberties due them as American citizens.

The Women's International League for Peace and Freedom maintains that freedom is more than the absence of unjustifiable interference with individuals' rights to a choice of action or expression or control of their lives. Freedom includes the right to a government responsive to the will and needs of the people it governs and should serve, and the right of freedom from the threat of political, economic and military subjugation. And very importantly, freedom requires constant safeguarding of citizens who are in the minority. It seems without question that loyal American citizens, whether military or civilian, must be as aware of the tyranny of the majority as we are of the rights of the minority. Today...

COL CORDINGLY: Madam, gain you are getting into political philosophy here. Does this have to do with the...

MRS. WESTBERG: Sir, this...

COL CORDINGLY: ...environmental impact of air operations.

MRS. WESTBERG: The people here are asking you what the environmental, the environment that they live with...

COL CORDINGLY: I understand...

MRS. WESTBERG: ...is asking for...

COL CORDINGLY: ...But I must mention that as the issue of environmental impact?

MRS. WESTBERG: They do tell what is being done by the environment you create to these people. I continue, sir. It is also justice the Papago People ask for. The Women's International League for Peace and Freedom wishes to point out that justice is the essential ingredient for making peace between and granting freedom to individuals and nations. There can be no future peace, freedom cannot exist, unless justice is the foundation for settlement between peoples and nations.

The basic cause of strife in the world today is the injustice of exploitation by the powerful, especially exploitation of minority peoples and nations. How fortunate we are that at this hearing a matter of the constitutionality and morality of activities of a military branch of our national government, the Air Force of the United States, can be questioned by American citizens and that we may hope for a decision giving back to 13,000 fellow American citizens on Papago land their human rights and constitutional rights.

This is not time for a history lesson and I spent a good deal of time to come within your time, taking historical things out, but there are a couple of things I would like to comment, because they apply to the whole. It's not a lesson, but we must at this time face the relevant and telling facts about the treatment of many tribes and nations of native American Indians, whose God-given continent this land was for tens of thousands of years before our ancestors arrived, uninvited, we might add.

Many episodes in our nation's record of dealing with Indians have been a reason for national shame, as most historians now see it. The Indians right to the land on to which Europeans moved was at the very first recognized in 1775 by the embryonic government of the...

COL CORDINGLY: Madam, you have one more minute, and then you must terminate.

MRS. WESTBERG: I will do the best I can.

COL CORDINGLY: That is the ruling; you have one more minute.

MRS. WESTBERG: I will do the best I can, sir. If you insist, I will go to what I think, that none of this is just, none is right, and to let it happen would be unconstitutional and immoral. Nothing, including national defense, in this case a questionable justification, is as important as the safeguarding of our rights under the Constitution, our greatest security against the loss of our democratic way of life. National security begins at home.

After General Eisenhower had lived to become President Eisenhower, he said that he began to feel more and more uneasy about the affect on the nation of tremendous military expenditures and the potentially dangerous power and influence of the growing military-industrial complex in the country. He felt called upon to warn the nation...

COL CORDINGLY: Very well, would you terminate that speaker?

MRS. WESTBERG: I'm sorry, sir. I demand my civilian rights...

COL CORDINGLY: Would you turn off that speaker, please.

MRS. WESTBERG: ...to state what the President of the United States said.

COL CORDINGLY: Would you please be seated.

MRS. WESTBERG: (Continued to speak from the audience, but was no longer audible to the reporter.)

COL CORDINGLY: Madam, you are no longer recognized. Would you please be seated. If you would like to furnish that statement in writing, it will be appended to the record of these proceedings.

(Translation of Mrs. Westberg's statement into the Papago language.)

CHAIRMAN WILLIAMS: Molly, Mark Caldwell, then Harriet.

MOLLY GARCIA: (Translation from the Papago language.) The lady's name is Molly Garcia from Sells District and also with the Papago Council, mentioning again about the, some of the things that have been talked about from some of the older people in our audience, have seen these things come about from the beginning; that a lot of the way that life was before and what it is now. That the white people came to this land and started to take it away. It should be up to the people here, as in the Papagos, to decide what it is that they want for themselves. The people, the white people, have come and they teach us things, and we have learned things from them; but we haven't learned as much as they. And there's a portion here that talks about some of the things that have happened here on this reservation that many people are not aware of. And also that a lot of it is left up to us to try to, to try to make these things aware to the people. It seems that you people, and here we're talking about the Air Force personnel that are here today with us, that you don't seem to think very much of us and everybody--or at least for herself--have that feeling. We may not know very much and that--but that we do know something, and that we're trying to--it's just that we're not, you know, we're not white people, I suppose, and not doing things the same way as you do. But again, the sonic booms that has been talked about and the low flying, she mentioned that the smoke that comes from these planes is poison for us, since it comes down to the earth and it poisons the people and the things that they have, that grow on this earth that the people eat. And again, just to mention that this was not so before, but--that there was nothing harmful then, but now, now there is. That's all.

CHAIRMAN WILLIAMS: Mark.

MARK CALDWELL: Can you hear me? Is that better?

COL CORDINGLY: The court reporter can't get it unless he uses the middle mike.

CHAIRMAN WILLIAMS: You will have to use this middle microphone, Mike.

MARK CALDWELL: Can you hear me now? My name is Mark Caldwell. I'm with Papago Legal Services, which is the only legal services office on the Papago Indian Reservation. We have our headquarters in Sells, which is the capital of the reservation. I am here to speak on behalf of individual clients the Papago Legal Services serves, and on behalf of the Tribe generally.

My understanding is that since our office was one of the offices that the Draft Environmental Statement was submitted to, that I will have an extension of time to make somewhat more extended comments.

95 [Before I begin those comments, for the record I would like to state a few objections. My first objection is that this hearing is being chaired by a military judicial officer, as opposed to the Chairman of the Papago Tribe. The understanding of our office until shortly before this hearing was that Mr. Williams would be in charge and these proceedings were held up for an hour and a half so that Mr. Williams could arrive, only upon his arrival not to have him chair the meeting. When the meeting did begin, very strict ground rules were set for the meeting that took 45 minutes to transmit, which time was time during which Papago people could not speak, and part of those guidelines were rather strict time limits. That is the

extent of my objections to this proceeding for the record. I'm sure the judicial officers of the Air Force understand as lawyers that nothing personal is intended by these objections.

Well, the question, I suppose, is why are we here, and we're here to comment on the Draft Environmental Impact Statement. This is a 62 page document that was available for many people who came in. The Draft Environmental Impact Statement was written, apparently, according to the requirements of a federal statute. That federal statute is the National Environmental Policy Act. The idea of the National Environmental Policy Act, as you know, is to have federal agencies look before they leap. Before they undertake an action that will have a significant adverse effect on the environment, they are to look at that action and see what harm they are going to cause. So we are to, in effect, help the Air Force, to let the Air Force know the harm that they are causing the Papago People.

In that regard, since this is supposedly not an adverse judicial proceeding, I'm going to confine my remarks to an evaluation of the Draft Environmental Impact Statement. Legal theories, if necessary, can be elaborated upon at a later time. I'm sure that any factual comments on the effect of the Air Force operations on the Papago People have already and will be stated much better than I can by the Papago People themselves.

The position of Papago Legal Services is that the Draft Environmental Impact Statement is inadequate. You have our position in writing before you, and my understanding is this will be appended to this proceedings. You also have before you the photographs that I passed up of Air Force jets flying over San Simon schools, school, and a map depicting the locations. I trust that will be included in the record as well.

Well, the position of our office is that the Environmental Impact Statement is inadequate because, in the words of the statute, it doesn't give a detailed statement about the environmental impacts of the Air Force action. It's a long document, but it does not evaluate the impacts properly.

96 [Number one, it's unclear exactly what the Draft Environmental Impact Statement is about or when it was written. It simply says that it is about the current and future operations of the Air Force. What are the future operations of the Air Force in detail? In many places in the Draft Environmental Impact Statement the Air Force has misdirected its concern. The concern of the Air Force appears to be with the Air Force and not with the Papago People. This is shown, for example, by stating in several places in the Draft Environmental Impact Statement that Air Force operations will cause more complaints and adverse public reaction. That's not a Papago problem; that's an Air Force problem, and it really has no place in the Environmental Impact Statement.

97 [The problem with many of the procedures outlined in the Environmental Impact Statement is that they thrust the burden upon the Papago People. For example, there is a statement in your Environmental Impact Statement that the Air Force pays for damage claims. I submit to you that is not true. It is true that there is a federal statute, called the Federal Tort Claims Act, and when a person suffers property damage, they can submit a claim. That this claim is always filed, and even when filed, that it is always paid, is entirely another matter. I suggest to you that you may well ask yourselves that with the problems of transportation and with communications on the Papago Indian Reservation, how many people take advantage of that so-called remedy?

I would also note that in your Environmental Impact Statement you say that much damage is confined to already damaged houses and windows. That is also inappropriate, if it is meant to imply that it is permissible for

the Air Force to accelerate the demise of already damaged housing. If a person has a cracked window, that window is no better--is better than no window at all, and no window at all is exactly what a person has after a sonic boom has occurred in many cases.

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Another example of the burdens being thrust upon the Papago People is the repeated statements in your Environmental Impact Statement that there is a working committee, that the Air Force is working continuously with the Papago People, that there is a continuous dialogue. I submit that there is no dialogue. The reason there is no dialogue is that the burden of solving Air Force problems, which the Air Force should solve, has been thrust upon the Papago People, and the Papago People do not have the resources to do the Air Force's work. I can tell you this from personal experience, because in our Legal Services office, which has three attorneys to serve approximately 15,000 Papago people, we do not have the resources to attend monthly meetings and to monitor Air Force activities.

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Lastly, as an example of burdens being thrust upon the Papago People for Air Force damage, I would submit to you that the Air Force provides no assistance in its damage claims. You had one speaker here today who was quite angry. While perhaps some of those comments might be taken by you to be somewhat intemperate, I think they do show the outrage that a person feels when faced with this governmental red tape.

It has been mentioned that one of the reasons that the Air Force gives for its operations is national defense. The position of our office is that national defense is a national problem, but the Air Force is making the Papago People pay for the national defense. For example, when you cite population growth in Tucson as being a reason to conduct training over the Papago Reservation, what you're really saying is that the Papago Reservation can be used as a dumping ground for urban expansion. About a week ago it made the front page of the Arizona Daily Star when Tucson got some sonic booms. If you read that story carefully--and it's on the wall over there--that sonic boom was created over Sells and a jet stream of air carried it to Tucson, apparently, and Tucson felt it. They were outraged by a few sonic booms. Your Environmental Impact says that in affected areas 19 sonic booms occur per day. I think that shows that the Papago People are being forced to pay the price for other peoples' benefits.

In particular, although this is a penalizing people for choosing to live in a rural area, such as the Papago Reservation, when you are talking about here, you are talking about a place that has been reserved to the Papago People by the United States Government in trust. And when you use this as your training ground, our position is that you're violating the Indian Trust responsibility, which holds that in dealings with American Indians the United States Government has the burden of carrying the highest moral standards. This isn't just a big, flat area. This is the ancestral homeland of the Papago People.

I think also today some of the testimony illustrates the suspicion on the part of some Papago People that the Air Force views the interests of the Papago People as intrinsically less valuable from the point of view of the dominant society. I think that is illustrated to some degree in your Impact Statement by your concerns with Air Force problems and your apparent lack of concern in many cases with Papago People problems.

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I would like to discuss some of the substantive areas you get into in the Environmental Impact Statement, and point out what I feel is a key deficiency, and that is this: The Environmental Impact Statement talks about physical damage, it talks about directly ascertainable harms, but it neglects in large part unascertainable harms. And what do I mean by unascertainable harms? I mean that the Draft Environmental Impact Statement

shows an overreliance on the need for hard data. In other words, the position is if we can't see it, it doesn't exist. I submit to you there are many things that you can't see with your naked eye that do exist--pride, cultural integrity. And some of the comments you are getting here today indicate that one of the greatest harms of Air Force operations is not the broken windows, is not the shattered walls, as bad as those are, but is the fact that Papago People feel that they are being insulted. And every sonic boom is not only a physical harm, it's a cultural harm.

So, to correct this, the position of our office is that you need to undertake an analysis of these harms. When people say they are afraid, I think they have good reason to be afraid. There was a crash in Tucson five months ago. There were seven crashes, as stated in your Environmental Impact Statement; there were more crashes since that statement has been written. There have been strafings of civilians on the ground, bomb craters on the Papago Reservation, et cetera. I submit that you need to pay attention to these cumulative impacts, that you look at the fourteen different legal theories under which the Air Force has an obligation to the Papago People, and that you take a hard look at what your operations are doing to the Papago People; that you write another Environmental Impact Statement; that you hold more public hearings, and this time go to the villages where these people are instead of forcing them to come to you. And that you develop creative alternatives, and that you develop creative alternatives to the harm caused by the Air Force, such as paying for this very valuable resource of airspace, such as developing new routes, such as developing safeguards to monitor the operations of your planes, and such as developing new operations and regulations. I thank you for your time.

CHAIRMAN WILLIAMS: Thank you, Mark. Harriet.

COL CORDINGLY: Excuse me. Mr. Caldwell. Mr. Caldwell, do you desire that that statement be translated by one of the interpreters?

MR. CALDWELL: Yes.

(Translation of Mr. Caldwell's statement into the Papago language.)

CHAIRMAN WILLIAMS: Harriet, we are going to take a break for 10 minutes, then we can come back. Okay.

(Translation into the Papago language.)

The hearing recessed at 1525 hours and reconvened at 1540 hours, 27 March 1979.

MR. TENNIE: Mr. Chairman, Air Force representatives, I would like to put in a request. I would like to request that planes coming in from any source, that they do not go over our school, that they go around our school, they do not go over the little villages here and over here. There's too many lives at stake. On the 16th of this month some planes came right down over our school, zeroed in on this little village right down here below the road, banked right over the top of the little village, zeroed in right on like as if they was going to bomb it, and they were low. And just a few years ago we had a plane that just made it over the rise over here and the plane exploded, and the pilot did manage to eject in time that it saved his life. But if that would have hit our school, we would have been minus a lot of children. We have over 500 children here, and we have people living on the campus, and the planes come in pretty low here sometimes, real low.

Some of the cowboys was telling me they were conducting a roundup up here the last few days, and some planes coming in low, and their cattle was

scattered from here to yonder. So maybe they could kind of go around our villages a little bit and go around our school. I don't think this is asking too much. And we are asking that the Papago lives be saved. And the windows rattle here from sonic booms quite often; even if the plane is off a little distance, we get a lot of sonic booms.

On the 16th at 8:30 in the morning there was one series of booms, then about three or four or five minutes later another series of booms, and the windows rattle, pictures bounce on the wall. It shakes pretty hard sometimes. And on the 21st of this month, 8:45 a.m., some heavy booms again. 27th of February, some real heavy booms. And this day that they zeroed in was at 11 o'clock, approximately 11 o'clock, so maybe you can check back and find out who's zeroing in on us and tell them we're not Vietnamese. Thank you.

(An individual in the audience asked about the buses.)

MR. TENNIE: The buses will be here until you leave. They will leave when you leave. The drivers are instructed to wait right up here until your meeting is over, and then take you home.

HARRIET TORO: First of all, I would like to raise my objections to what just happened, but I think I'll go ahead and go into what we are discussing right now. I'm Harriet Toro and I represent the Chukut Kik District, which lies in the southern portion of our reservation; and I would like to say what I have to say in English so that I know that they understand what we're saying. First of all, I would like to say that we Papagos have always lived in harmony with nature, and that now with the invasion of what I call these mechanical monsters and their sonic booms, they have already done quite an amount of damage. And one of the things that concerns me the most is that one of our senses which your professional medical people cannot restore is our hearing. I feel that this is one of the major effects that these sounds have had. The other is--you would probably never understand this, but our inner being is being disturbed by these booms. Our constituents have complained about childrens that are frightened by these noises, and they cannot--when they are asleep, sometimes they awake shivering, and they sleep with their eyes halfway closed. And I know that this is a fact, because I have witnessed this with my own children. I have three small children, ranging from the ages of one and a half to six, and when they are out playing on a quiet day and one of these sonic booms occurs, then they come running and they just run in any direction. And to me, the Air Force is, to me I call that child abuse.

And the other thing, as is mentioned before, is that our animals are scattered away from us again, and yet we are dependent on them for food. And one of our, several people have left already, but one wanted me to mention that she works at the Community Health Office near Sells Hospital, and every time that occurs, their whole trailer rattles and they're afraid that the floor will cave in one of these days.

And you have heard about the destruction being, that occur on the traditional homes as well as the hip (ph). Well, I also want to mention that this also occurs on our hut, hut homes, windows breaking, walls cracking and also the foundations giving away.

The other thing I want to say is your experts could never detect the disturbances that occur within us, but we have our own people that are knowledgeable about this.



And one of the other things I want to mention is the flight patterns that are drawn on those maps over there, or corridors, whatever you call them, are not followed. And this disturbs me again, because on the other

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map you have circles around, I guess maybe what you consider, or whoever considers major communities, and yet in the District of Chukut Kuk we have San Miguel, Vamori and New Fields. These are our major villages and I just want to say that I want circles drawn around those areas and I want your flights to stay away from them, and also to stay away from the ranches that are scattered throughout our district. What's more, I want to see all flight patterns outside our reservation boundaries. I want them to go to the outside and let the other people see what effects have occurred to our own and see how they like it and how they will react. And these booms have been destructive to us and we want to be left alone.

And the last thing I want to say is that you know the U. S. Government for two hundred years have tried to assimilate and terminate us, and now we see, now we're witnessing another modern day technique of trying to strip us of what little we have left. But I care for my people and I care for the air and the earth and the animals, and I want to say that I will continuously object to some of the things that you're doing, and I want to say that I think it's a deception for the Air Force to be saying that they are using our land so that they can gear up the defense of our country, because to me it seems like you are trying to wipe us out, not only physically but spiritually.

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And the other thing that I would like to have answered during your questioning period is that are your planes carrying any bombs when they go on these flights. Thank you.

(Translation of Mr. Kenny's statement and Harriet Toro's statement into the Papago language.)

CHAIRMAN WILLIAMS: We had a couple of other, three other people. Clifford Pablo.

CLIFFORD PABLO: My name is Clifford Pablo. I reside in Sells. As a courtesy to my people I will speak to them in Papago, and then translate to you people in English. (Speaking first in the Papago language and then in English.) I came to this hearing with three main concerns to voice to you members there. My first concern is that of a board member on the Indian Oasis School Board of Trustees for the public school system here on the Papago Reservation. I'm sure there are those of you who are familiar with the problems that have existed related to the sonic booms here on our reservation. You have been through the schools, you have seen the windows that are broken, the projects that have been obstructed, the foundations that have been damaged, and I think you are fully aware of the physical damage that these interruptions cause within the school day. However, my concern is not only with that physical concern, but with the mental damage that you now cause to our children.

There has not been one person who has come to this microphone and has not stated to you directly of the physical anguish, the mental anguish that you cause them. I'm not quite sure that you totally understand that or that you ever will. It was translated to you that their heart does flips, that their hearing is lost; but more than that is my concern for the physical and mental wellbeing of our young children, our school children, and our youngsters. I have in my own home a eight-month old child who shudders one to two hours after hearing one of these sonic booms. Being a nurse, I have measured his apical pulse jump from a resting 90 to a rapid 140, and that's pure physical assessment, based on the damage and on the noise. So I want you to realize that our people are voicing the physical attributes and complaints that they feel they must, but it is for your to interpret that it is for their physical and mental and cultural way of being that they voice these complaints. Thank you.

CHAIRMAN WILLIAMS: Thank-you, Clifford. Dr. Cairns.

DR. CAIRNS: My name is Bob Cairns. I am the Chief of the Medical Staff at the Sells Indian Health Service Hospital and have been here at Sells, or over at Sells for about three years now. Most of my comments have to do, or I'll be speaking in the name of the medical staff and representing, as far as I'm concerned, the interests of the hospital, the patients and both the medical and the rest of the staff in the hospital. We have all had our problems and they are, primarily my comments will be on the sonic booms.

To give you an idea that this isn't an isolated bit of land out here on the reservation that is so sparsely populated that you don't need to be concerned about the individual interests of people, we have approximately 37,000 outpatient visits per year in our hospital. That's the Sells Hospital. The Santa Rosa Clinic, right across the street from the school here, and in the Mobile Health Unit, which is kind of a truck-trailer examining room and small portable laboratory that is taken around on a regular basis to the villages of Gu Vo, Pisinimo, Hickivan and Kaka on a regular one-day-a-week schedule. You have heard complaints, you have heard statements from people from all of these villages, and I can only say that the people that work on our mobile health unit experience all of the difficulties with the sonic booms, the rattling of the building, the loss of rapport with patients, the startle reactions and so forth, just as many of the people have pointed out they see in their own children in their homes.

My own personal experience, and I can probably generalize this to the experience of the other medical staff in the hospital, is that over the last three years, because of the intensity and the unpredictability of the sonic booms, but the great number of them, that I have been personally interrupted in just about every kind of a procedure that we perform in the hospital at Sells. The hospital at Sells does not do major surgery, but we do most of the things that are done in a regular outpatient clinic, to include things like deliveries of babies, about 140 a year, and I've been interrupted in at least two or three deliveries in the last year. Physical examinations, including pelvic examinations; circumcisions of new-born children, at least on two different occasions I have had those interrupted, and a number of the kind of procedures we do in the emergency room, suturing and so forth, especially in the areas of the face, places where you try to get a good result, because you don't want people to have scars. There have been enough sonic booms, they have happened often enough, they are of enough intensity that at least once or twice in the last eighteen months I can say that I have been interrupted. There are five other physicians, three physicians assistants and a nurse practitioner on our staff, and they have all had similar types of experiences. Now, I'm just talking about procedures, and I think that all of us have been impressed here this morning and this afternoon that the things that the people have been talking about are not procedures and material so much as emotional and spiritual wellbeing. But I just wanted to get in a little bit about procedures, because I know it's important to have a few of those kind of material facts.

I think because of the fact that Sells is the larger population area and perhaps is a little easier to miss, we don't have quite the problems at the hospital with the low-level aircraft flying as we do with the sonic booms. But the low-level flying does become a factor when we are talking about some of the other operations that we have, especially over here at the Santa Rosa Clinic and the Mobile Health Unit. The Mobile Health Unit itself has been buzzed a number of times by low-flying A-10s. The personnel going out to the Mobile Health Unit have also had the experience of a low-flying jet aircraft either coming up the road or crossing their paths, sometimes sneaking up on them from behind, sometimes coming down the road

directly at them and then taking off at the last minute. So we do have some low-level aircraft incidents that have interfered with our operations.

There is another factor that has not been brought up, and this had to do with the fact that we are an isolated health care facility, who frequently have to medically evacuate patients to Tucson and Phoenix, larger hospitals there, and our primary means of evacuation is ground ambulance; but at greater frequency over the last year, we have had to employ the services of the Department of Public Service helicopter, as well as fixed-wing aircraft from Sky Harbor Airport in Phoenix. The experiences that the pilots relate to me anecdotally, landing and taking off in the Sells area, express a great deal of anxiety about the possibility of being, of making an approach into Sells, either to the airstrip or directly onto the hospital grounds, and having an unexpected encounter with a low-flying jet aircraft. They do their best, but every pilot I've talked to, I've talked to a number of them, have expressed a good deal of anxiety about flying on the reservation, because of the large number of low-flying planes.

105 { I would like to not repeat things that other people have said, so I would like to conclude that as my organizational comment. I would like to make a short personal comment about my own reaction to some of the things that I've seen people subjected to out here and to which I have been subjected to myself. It has been very obvious to me during the course of this morning and this afternoon that the real things about environmental impact are being said by the older people, the first two or three people this morning and people like Miss Toro and Clifford Pablo, who are able to express themselves in English. It's unfortunate the Environmental Impact Statement and the commentaries are going to have to go through the process of being translated, because a lot is going to be lost. I would like to perhaps relate something in language that those of us who have been in the military here, both Papago and Air Force, can understand in response to low-flying aircraft and sonic booms. In 1968 and 69 I was involved in Vietnam as a medic in the Army and as such was on the receiving end of both air support from jet aircraft, 250 pound bombs, napalm, things of that nature. I was also on the receiving end of artillery, mortar and other types of artillery attacks. We were talking and we've heard a lot said about the reactions of the children to sonic booms, and the reactions of children, both in the school and children at home, to low-level aircraft flights. I had a chance to look briefly through that Environmental Impact Statement from my point of view as a physician. I was interested in, you know, the details, the technical details of how you measure the effects of sonic booms, and it became very apparent to me that there's no real way to do it, because your statement, or at least the statement that sort of sums up sonic booms, if I can quote, is that they are annoying and disturbing. Obviously, there's an element here that goes beyond annoying and disturbing.

My background military experience causes me to react in a way that I find it very easy to believe when people tell me that their children react with a lot of fear to sonic booms. About 18 months ago I nearly drove off the highway headed toward Vaya Chin. An F-100 coming down the Vaya Chin road toward Vertana, about 100 feet off the ground, suddenly loomed up in the windshield of my pickup truck, and I nearly went off the road. I was surprised; I was scared. My gut reaction was the same reaction that I might have had nine or ten years ago and it's, you know, here I am; there's no war going on here.

I would like to point out that the people here, myself included, are the unwilling participants in the practice that your pilots are getting in the war games that they are having, and even though they may be described--the low-level flying, the sonic booms, the national defense necessity--may be described in those words, the reactions of people, and not just children, adults such as myself, to the sudden appearance of a jet swooping down on them or a sonic boom at an unexpected, loud time, is an unfair imposition on all of us. Somebody may have to bear the burden of national defense, but it

seems very unfair. And I think in your Environmental Impact Statement, if it's at all possible, you've got to be able to get something in about the spiritual, emotional, the fright factor. The machinery you've used to record the number and intensity of the sonic booms, that's really just a small part of the environmental impact. Thank you.

(Translation into the Papago language.)

CHAIRMAN WILLIAMS: Rose Mary.

106 ROSE MARY LOPEZ: (Speaking first in the Papago language and then in English.) Now, I would like to speak in English, because it is true that some of the things that are being translated are, are--it is difficult to translate and some of the meaning is lost. And first I would like to say that my name is Rose Mary Lopez and I represent the Chukut Kuk District and I would just like to again bring to your attention that the map that has the circles around them, the villages of New Fields, and San Miguel and Vamori do not have those circles, have any circles around them, and yet we do have a lot of people living in those villages. And also areas further down west of that district. It looks like there's not people living there, yet we have people living there and that are taking care of their cattle. I know that, you know, people will say, "Well, what does that have to do with it?" You know, it's very important; it's their livelihood of people that are living in those areas. And the sonic booms disturb them when they are on roundups or even just plain disturb them. And they are harder to handle.

The other thing that I said that I am one of the persons that went before and met with the people in the Pentagon, and they were saying the very same, well, saying that they would look into this and get a PR from Davis-Monthan and as to, at least for myself, I don't know what has gone on since then, we got the feeling that something would be done and I feel that nothing has been done, and in fact everything, the activities have increased.

I talked, I mean it feels that, I'm expressing that you don't believe us that these things are happening, and yet they certainly are happening. And I personally support our elders, and I myself personally felt a sonic boom just a month ago and my jump did--my heart did jump. And I do believe, you know, that these things are happening.

And also I have a child of my own, and when they're napping in the afternoon or in the morning, I have personally felt, when I've turned everything off, the radio and the TV, and have personally felt the earth shaking and the boom. And I wonder, how are our children being affected, the psychological effect that it has, how are you going to measure the psychological effect? You can measure probably some of the physical, but you can't measure the psychological effect that's happening to our children, now and in the past, in the future, and that's one of my concerns.

My other concerns is that, my other thing that I voice was that it is true that these planes are flying very low and over the school in Topowa, the Village of Topowa, where I have a daughter going to school, and they fly right near or right over that area. And also, I voice that, you know, when they're having these--I don't know what you call them--plays or activities where they fly straight up, straight up into the sky and then they come straight down and then across, you know, I mean to us, you know, that kind of activity is really uncalled for, because it does, you know, it does again, when is it going to, when are we going to have a crash and, you know, what's going to happen to our children? And all these things are uncalled for.

I brought out the fact that Mr. Tennie brought out the statement about Vietnamese. We're not Vietnamese; we're not your enemies. In fact, we're

known as the Peaceful Papagos, and whenever, you know, people come to visit us, we welcome them, we feed them and, you know, they are happily on their way. And yet in return we, we are mistreated in this way. And just an added clause, you know, we've had, our people have served the country of the United States; they have served in the Second World--First World War, Second World War, the Vietnamese War and all the wars, so I feel that we need, we need something done for us in return. We've given up lives, our lives have been given up for this country.

I also feel, I also feel that I want to make this statement: That to me, in conclusion, all these things are, you're, I think the Air Force is committing a psychological what you would call rape to our people. I've heard of psychological death, and I feel that this is psychological rape to our people. I feel that this is, this is, you know, uncalled for. What are we going to do, what can we do as here people on this reservation to change their attitude? You know, do we have to form armies and develop military techniques, tactics, you know, to combat yours? That's all.

CHAIRMAN WILLIAMS: Sister, I believe you have been waiting there for some time.

SISTER RUTH: I'm Sister Ruth and I live in Pisinimo Village, and I've lived on the Papago Reservation for seven years. And I'd like to reiterate what the people have been saying. These are not just isolated booms, these occur constantly. We made a, we've been trying to chart all the sonic booms in Pisinimo and we've missed quite a few, but we made the chart and hung it on the front wall there, so you can see that many times every week we get bombarded by sonic booms, and some of them extremely severe. And no day is respected. Even Sunday mornings at 7 o'clock in the morning we have sonic booms. Even nighttime, after the sun has gone down, we have sonic booms. So, the intensity of the booms is another factor. We have a small school in Pisinimo, and a sonic boom so severe that it knocked off a piece of the window frame in the school which flew across the room and narrowly missed a child's head. This gives you an idea of the intensity of the booms.

And what the people have been saying about cracked houses and cracked churches is true in Pisinimo too.

But most of all I would like to say that the people in the desert have acquired the silence of the desert, which is one of the most beautiful things of the desert, and this has permeated their bones, their lives, their whole manner of acting. They are such a quiet people that city people just have, have no understanding of what silence is to the Papagos. City mothers and visitors are dumbfounded when they watch a Papago mother correct her child. They very rarely raise their voices a, we almost a whisper to correct their child, and that is enough. The silence just penetrates their very, very lives. And I feel that the sonic booms and the low-flying aircraft and the noise of the aircraft is destroying their total environment, not just their houses, not just their horses, not just their cattle, but the silence which is so much a part of their lives that it's their very heartbeat, their very language, their very way of living. And so in destroying that, you've destroyed their total environment. And I really hope you consider that.

(Translation into the Papago language.)

CHAIRMAN WILLIAMS: (Speaking in the Papago language.)

PABLO BAPTISTO: My name is Pablo Baptisto, Hickiwan Village. I used to live in Gila Bend. (Speaking in the Papago language.) (Translation from the Papago language.) The person that was up there, his name is Pablo Baptisto, and he's from Hickiwan Village. Pablo is concerned about the kids

too, because he's involved as a teacher for the Head Start Program, and he has worked under this program for seven years. And he says that where he works in Vaya Chin it seems like that's a target for these planes that want to do their training, and it seems like that's the only place that they fly over. And he said that he's concerned about the impact that it has on the young kids. He said two years ago there was a preschool that was built there at, in Vaya Chin and I think it was not even two years that this school building was condemned because of the cracks and the foundation giving away from sonic booms. There were some inspectors that came and inspected this building and condemned it, and they said that one more sonic boom would crumble that building in. And he was concerned about the three and four and a half year old kids that he has under him. He experienced the way the children reacted whenever the planes fly over and sonic booms. He said that they scattered and run in all directions. And we don't know, you know, just how the child feels, because, you know, we never ask them. And he said that all the other centers on the reservation, there's various centers within, on the Papago reservation within the districts, located in the central areas where the kids are, where the preschools are established. And he was appointed to look into the problem of sonic booms and they all seemed to have a similar problem. Like they experienced the sonic boom where the windows were shattered and, you know, cracked walls and so forth. And he said he used to be a bus driver and he experienced the planes that would be flying out there on the reservation doing flips and eventually would dive at a certain target, and he says he experienced a sonic boom when he would be driving a bus and every time, you know, that a boom would sound, you know, it seems like inside the bus is pressurized and the windows would open. And he indicated an incident that he goes hunting by the mountain in Hickiwan and on the mountain he finds pieces of metal. I guess it's from the plane. I didn't really understand that, but he mentions some pieces of metal that comes out from the plane that are flying over it, and he said it's heavy. And he was concerned about the handicapped children that he's involved in teaching them; because they are already handicapped, whenever the sonic boom scares them they go into seizures and it takes some time, you know, before they come out of it and it's really, you know, a health problem that these kids have to go through. And he said, like somebody had mentioned previously, that how does the child feel when they get scared, because they can't explain it themselves and yet, you know, the things that they experience are later on in life that has an affect on the outcome in his life. And we never question it, or we never ask the child, you know, "How does it affect you?" you know. And this has been brought out before, that it seems like, you know, we are sitting up here bringing out these problems and here the child is neglected, how the child really feels and what he has to go through. He said there's an old man that lives within the family where he lives and the sonic booms practically knocked all of his house down, it's just a little piece here left, and he gets so upset, you know, that people come and ask him questions and inspect it and say they are going to build him a new home, but this never comes to being. And that's all he said.

CHAIRMAN WILLIAMS: Vern, you have been waiting, then Ella.

VERN SALCITO: Mr. Chairman and the rest of the committee, my name is Vern Salcito and I'm from Manager's Dam and Village. We are located in the southwest corner of the reservation, or southwest corner of the Area B map that you have on page 8 in your blue book. I have some remarks concerning the airplanes that are flying over our village. We are the lower part of the reservation that is close to the border. As a matter of fact, it's just a hop, skip and away. But the airplanes there that come over are real low. They--some--I inquired about it one time and they said some of them take pictures. I understand for our national defense and for the immigration program that they do have to take the pictures. But sometimes

they seem to me that they just play around up there. They fly so low and make dangerous curves from the mountains that we have there, and it seems that some day they will crash in it and it will probably be up to us, since you won't be able to get to them fast enough, to see if there is any survivor or what; that we may be the ones to have to go and see. Our houses are mostly made of adobe, and the sonic booms that we have shake the earth and will eventually cause some of them to tumble. Some have windows and they shake a lot and sometimes you will see them, they shatter. But mostly in my concern is that we have our house that have mirrors in them and they are tile mirrors, and every occasional a sonic boom goes off and one of the mirrors pop out.

And also, are the cattlemen that go roundup there, they try to head the cattle into corrals, and when a sonic boom goes off, the cattle scatters all over the place. The noise is very loud over there when they go over.

We have a dam that's not very far from the village. As a matter of fact, it's probably about a quarter of a mile, if you walked it, but it's not very far. That dam is made of a pile of dirt and there is a lot of water in it right now, and I feel that if the sonic boom hits hard enough and the wave is very strong, that it might tumble and all that water will come into our village. Now, we feel that maybe if this happens, we want to know if we are going to be compensated for it. We want to find out whether or not our village will be repaired or given some houses put up for the people.

The old people there are quite a few. Some of them are restricted to their bed or they grope around, but their heart condition is not very strong. And I know very well that when a sonic boom or low aircraft flying over them when they are walking around, they will eventually stumble and trip and fall because of the noise and the shaking of the ground. Our people, as Papago people, are concerned about this, because of our wellbeing physically and mentally. We have stated many times, and I do not understand whether you understand what we feel. We know and we are trying to express to you the feelings we have, that mentally our children is affected. I have a daughter that's a year and a half, and when she's asleep taking her nap and a plane goes overhead, it wakes her, because she is used to being in a quiet environment for her, for going to sleep. And sometimes when a sonic boom goes off, she comes running in, because she doesn't know what it is, and to her, as she says it to me, it's a monster.

Now, this is some of the things that we as people are expressing to you. Maybe you don't understand it and you've never experienced it if you live in a city. And I know very well that the city people do not have this experience, and if they did, they would complain like Tucson did. We are now putting our complaints to you in oral, and some of them will be in written, and we would like for you to listen to us and hear our sufferings that we go through, our damages and whatever. If you need for us to be able to put it in writing and for you to have to pay for all the damages, then fine, we'll do that. And if you need for us to go to court, to take you there, fine, we'll do that too. But mostly, we would like for you to think of us as human beings, not because we're Papagos, not because we're not white, and because we're human beings and we have a right on our land, and we have a right, as every human being does, on this earth, no matter who it is. Thank you.

CHAIRMAN WILLIAMS: Ella.

ELLA ANTONE: Cecil, the rest of you men from the Air Force, my name is Ella Antone and I'm a Community Development worker of Gu Achi District and I am going to say it in Papago so that some of these that don't speak English can understand what I'm saying, and then we'll let one of Andy or Henry interpret. (Speaking in the Papago language.)

(Translation from the Papago language.) The lady that was up there, her name is Ella Antone and she is a Community Development worker for the Gu Achi District. The first thing that Mollie brought out was for another person--Ella brought out was for another person, the name of the person is Mollie Ann Lopez, and she gets her mail at Quijota Trading Post. The thing she brought out was about a house that this person built not too long ago, and she stated that it was plastered with cement inside and outside, but eventually the sonic booms had loosened the plastering and it's caving in and it loosened the roofing, that water is coming through the roof. And it's all relating to the sonic booms that's causing it. It was built just fairly recently, but already, you know, it's damaged to a point where she, you know, the water is coming through the roof.

And she brought in another problem concerning another individual by the name of Mollie Moreno, and she gets her mail at Santa Rosa Trading Post. And she mentioned that three or four years ago she was sitting in her room and then she decided to lay down in bed, and while she was laying there, all of a sudden a sonic boom went off, and the window shattered and fell on her face and cut her on the chin. And she bled a lot there and eventually was taken to the clinic here in Santa Rosa. And after that, when she was treated, I guess the next day or so, some people came, I guess whether it's the Air Force, and asked a question concerning the accident and took all the information and told her that they would come again and compensate her for the damage. And up to now nothing has been done about it. And she was relating this information to Ella and stated that maybe the people that are coming up here to this public hearing would have some information on this incident, and I guess she wants to know, you know, why she hasn't been compensated or when she will be compensated for this damage that happened to her.

And Ella also stated, you know, a personal problem that, not exactly a community building that she was relating to--she felt this is a very important building, because it is a meeting place for the district, where they meet and discuss their problems and make decisions which benefits the whole district. And she stated that 25 years ago she left, for 25 years she has been off the reservation, and after she came back, three months later she became a Community Development worker, and one day her director called her in to tell her about her job, the role that she will be playing or working and what she would be involved in. And she noticed a crack in the community building wall that she could see right through. And that was in 1972, and she asked the director, you know, whether, you know, the people that built that building didn't do the building right and that's why it had a crack in there. But the response that he gave her was that it's caused from the sonic boom. And now today it's getting larger and it's getting worse, and she's afraid that some day it's going to collapse. And yet she feels that this building is very important to the district. That's all.

CHAIRMAN WILLIAMS: (Speaking in the Papago language.)

RALPH AGUILA: (Translation from the Papago language.) This gentleman who was just up here, his name is Ralph Aguila, currently from, living in Hickiwan, formerly from Manager's Dam. And he was just talking about an incident that happened in Vaya Chin, where they were having a--okay, sorry about that--this happened in Gu Vo, where the, when they broke for lunch from their meeting, there were planes flying around, you know, near where they were at, and somebody had said that they, the planes had collided in air. And so they went outside to check and the teacher at that place had said that they should go and investigate. And apparently the planes were, collided above, near Pisinimo Village. So they went over and found the, where the planes had crashed, and the debris and just everything was like strewn all over the place. The pilot apparently was killed in the accident and, as he said, that his whole body was destroyed. They left him alone.

His face was almost completely gone, as well as his intestines were, you know, all over the ground and out of his body. To himself, he thought about this incident, because it happened, the crash was like four miles out of Pisinimo, and yet in Pisinimo there are a lot of people that live there, and they live close together. And he thought what would happen if this was, these planes had crashed in the village.

And later on, and then another incident where they were working in a place called Emika, where again they were on their lunch break, and this plane came directly at them, and just before it reached them, it went up from there. But it went as low as this building here before it, you know, it picked up and went on up. But I guess the fumes from the jet, you know, ruined their lunch where they couldn't eat any more. He just said that it left a bad smell in the air.

Another incident that he talked about was where somebody, he was talking with one of his friends before, yesterday, and told him that he was going to be coming over here and he wanted him to ask here why these people do that, you know, where they come down on people and scare them. And I guess this man was on a roundup and herding the cattle in, and one of these planes came at them, flying low over them, turned around and came back and did the same, then turned around and came back, so a total of three times over these people. And again it scared them and also the cattle. So they figured that they would just, you know, let the cattle go and not try and round them up again, because they thought maybe this pilot was, might be drunk and was trying to hurt them. And his comment is that they are always doing this. And finally, he just said that usually the planes that fly away from the village, but for some reason they will turn and head for the village and do the same as, you know, fly over the village a few times. And that's all.

ED KISTO: (Translation from the Papago language.) This gentleman who was just up here, his name is Ed Kisto. He again is just agreeing with a lot of things that were being talked about earlier today from some of the elders that came before this morning. And also, he was one of the people of the delegation that went to D.C. to the Pentagon, and he was just commenting that once they got there, they were searched and thought that maybe him and Tony Felix, sitting next to him, and I guess Rose Mary, that they looked like criminals, that's the reason why they did that, I'm sure, is for national security. And what he had tried to explain to the people at the Pentagon is that they, meaning the government, has taken away the land from the Indians and left a small piece for which to live on, and now they are using that land for their, for their air training. He commented that for us, that we have learned from the white man to speak their language, and that we should talk together with them and try to resolve these things. And just again, that once the people at the Pentagon had assured them that the sonic booms, the low flying, or at least they tried to ask them if they would not do that any more, and as he reported back to his people, it seemed that it got worse, they are doing more low-level flying and increased sonic booms. And as was mentioned this morning by one of the ladies, that the Air Force is just using this land as their roads for their planes, and that it's like our home here is being used by the Air Force as their roads, and there's just a question in his own mind like what will happen from here on out. A comment made today, this morning, there's a store in Sells, they call it the High Store, that apparently is going to be closed as of the 15th of May, because it's falling apart, and it's contributed to the sonic booms, and yet a lot of people depend on that establishment for, you know, for purchasing their food. That's all.

CHAIRMAN WILLIAMS: (Speaking in the Papago language.)

RALPH ANTONE: Good afternoon, Chairman Cecil Williams and the Air Force officers here. I'm very happy that we have this opportunity to voice some of our opinions on our actual experience with the sonic booms. I'm really amazed that today we've got a peaceful day. We haven't even heard a sonic boom or anything today, and hopefully that this can continue on from here on.

I would like to just say that our Papago major heart's goal is to live in harmony like autumn within the environment. Autumn is the people. And with all this air pollution, contaminates our desert growth, our vegetation, especially now, you know, when the giant cactus harvest. They open up from the top, and yet when all these gases pollutes the fruits. We gather these fruits during the summer time, we use they for syrup, jam, and even way back we used to have our sacred ceremonies in making wine. And everything has already been mentioned about, you know, the physical, the mental disruption of our today life. Every time I hear one of these sonic booms I feel so sorry for these men. Just what goes in their minds when they shoot off into the sky and what happens here on this earth, on our, you know, our Papago reservation? It seems like that we're made the target here. Every time we hear these sonic booms, we know that somewhere something is being disrupted. As it already has been said, time and time after since this morning, and we're still hearing a lot of these things, the actual experiences. One of the doctors had just mentioned, which I had a similar experience as I was coming in from, you know, to work, where this jet came right above me and I thought someone was riding in behind me, so I was just about to slam on my brakes when I saw the jet go on. So I imagined I was being used as a target. And a lot of the scattered villages throughout the reservation here, as had been mentioned, have been used as targets. So here, as we're voicing our opinions to you seriously, we hope, or we would like to say that just take this seriously as it has been detrimental to our, you know, to our people here. We're human; we have feelings, and it's already been mentioned before, so this is what I would like to comment on, that you take this seriously. Thank you.

(Translator into the Papago language.)

COL CORDINGLY: Ladies and gentlemen, that appears to be all of the presentations, so we're going into the question and answer section at this time. I would again ask you to state your name and address and all of the questions will be referred to Colonel Smith here. Colonel Smith will either answer the question personally, or he will direct it to one of his experts here in the room who is knowledgeable in that area. If you should ask a question that we don't have the answer to, if you would again give us your name and address, I can assure you that we will mail you the answer to that question as soon as it's obtained.

(Translation into the Papago language.)

107 → RALPH ANTONE: I'm sorry; I'm going to have to leave in a while, so I thought I would try and be first. My name is Ralph Antone, my address is Post Office Box 147, Sells, Arizona, although I do live in the Village of Covered Wells, Quijota Trading Post. About two years ago, July 28, 1977, I was asked to assist in touring the areas with some of your Air Force officers, and we went around and, you know, toured the area. My concern at this time is, I just got this a little while ago and I haven't really gone through it, but it just happens here that I turned to page C-1-3, C, 1, dash 3, where it says compensation available for sonic boom damages. Now, at that time when we were taking the tour, there were some forms that were to have been issued out for reports to come in and that any damages done to any of the homes or any damage was to have been reported and to have been compensated. At

that time my home had had a crack in the walls and they took pictures of it and made a report on it, and now I've got two other cracks in the wall, but so far I haven't heard anything as to what, you know, what has been done to try to repair the cracks in the wall. That's my first question.

My second--oh, excuse me, did you need to respond or what?

CHAIRMAN WILLIAMS: (Speaking in Papago language first, then:) As long as you're speaking, just go ahead and do that.

RALPH ANTONE: You mean on the damage of my house?

CHAIRMAN WILLIAMS: (Speaking in the Papago language.)

RALPH ANTONE: Oh, I guess my main question is, you know, what happened to, you know, after filling out a report and taking pictures, you know, so far we haven't heard anything about any compensation or any response as to, you know, what's happened up to this time.

(Translation into Papago.)

RALPH ANTONE: I don't know, so that's what I'm asking.

COL SMITH: Mr. Antone, if you would, I'm going to tie the question that was asked earlier by Mr. Emilio Francisco, who asked who will pay. I think now your question and his question is about the same. I think we can answer his at the same time. And I will have Captain King, the legal officer from Davis-Monthan, answer your question, what happened.

RALPH ANTONE: Thank you.

CAPT KING: Mr. Antone, I'm Captain King from Davis-Monthan. Davis-Monthan is responsible to handle all the claims which come off the reservation. I am not personally familiar with your particular claim at this time. I can go back to the office and look at the file. I'm sure that if you have filed a claim, that obviously there's an open file on your claim and that the Air Force is considering the claim at this time. We do have in the local office at Davis-Monthan some restriction on the kinds of claims that we can decide here locally. We cannot decide a claim in excess of \$2,500, so if your claim was more than that, it would have had to have been referred up to higher headquarters. If that happened, it does take time for these things to be processed through, so we anticipate that we will get an answer to you shortly, and I will at least check on the status of your claim now and get some kind of letter to you as to where we're at at this particular time. Does that answer your question right now?

RALPH ANTONE: Yes.

CAPT KING: Let me say just a little more about claims in general, and the way our office handles them. We have received in the years 1977 and 1978 at Davis-Monthan approximately ten claims off the reservation. These cover various kinds of damages, glass damage, structural damage and personal injury, some including head injuries and hearing losses. We have received over 80 percent of those claims in the year 1977, less than 20 percent of the claims were filed in 1978. I heard a gentleman here earlier today say that he didn't know what happened to his claim. I assure you that we never throw a claim in the wastebasket or anything like that. We do open files on them; we keep them open. We do sometimes send investigators out, and we look at it; and if we can't decide locally what to do, we send it up to higher headquarters, and that may be well what has happened in your case. The Air Force has a policy that we try to pay any and all claims which are

fair and reasonable. In 1977 we had six claims for glass damage and we paid them all. When you submit your claim, we do ask that you give us as much information as you possibly can. It's very important that you give us the date, the time and the place of the incident, and what kind of aircraft, if you can tell us that. And if the aircraft is close enough to you, if you could get that tail number, that's very important. The more proof that you have about your claim, the quicker that the Air Force will be able to settle the claim and give you some kind of compensation.

We realize that it's difficult for many of you as claimants to come or contact our office in Tucson. As a result of that, today we have brought a number of claims forms, some which we have left with Chairman Williams, some which we have left with Mr. Ulmer of the Papago Legal Service Offices, and if you do have a claim, please contact one of those individuals and get the package. There are some instructions on it. Perhaps they can help you answer the questions you may have. If not, feel free at any time to contact our office in Tucson and we'll provide whatever assistance for you in completing the forms that we possibly can.

Yes, if you have a call and you want to call us collect, then give us a collect call and we'll try and answer your particular concern or your question on the... The phone number is with the forms. Mr. Ulmer has the phone number; Chairman Williams has the phone number. For any of you who would like to write it down at this particular time, the number is 748-5242 or 5243, in Tucson. 748-5242 or 748-5243 in Tucson. My name is Captain King from the legal office at Davis-Monthan.

(Translation into the Papago language.)

CAPT KING: Chairman Williams and Colonel Cordingly, let me make one more statement here in answer to the question. Regardless of which Air Force officer you talk to, none of them have the authority to settle claims. The claims can only be settled on the forms with the Department of the Air Force. So don't simply talk to Air Force officers about your claim. These forms which Chairman Williams has and which the Legal Services Office have are the required forms, and you must fill them out before the Air Force will consider and pay your claim. So be sure that you do them, and we do ask that you do them as soon after your claim develops as you possibly can, while the event is still fresh and while there are witnesses and we can do research on it. And if you'll do that, we'll try and do what we can for you. Thank you.

(One of the Air Force officers) If you pay without the form, you would go to jail?

CAPT KING: Well, that's right, sir. I would go to jail if I paid without the form.

(Translation into the Papago language.)

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BRENNAN HARVEY: My name is Brennan Harvey and I'm from Topawa, Arizona, Box 795, 85639. And I want to ask you if you, if you guys are aware of where your planes are flying? I mean, and if so, if you're aware of how low they are flying. Or is it just a system where you just give them the keys or whatever to the plane and let them fly as low over the village as you can, or as they can, and call it training.

(Translation into the Papago language.)

COL SMITH: All right, I think I could probably answer part of that question or all of the question myself. However, we do have the people from Luke

Air Force Base and Davis-Monthan Air Force Base here with us today who have local responsibility for where and how these airplanes fly. I will give you part of the answer and then I will let them expand on my answer. The answer is no, we do not give our crewmembers the keys to the airplanes and let them go where they would like to. FAA requires that we do our flying in special, set-aside areas. The pilots are briefed very clearly where those areas are and what they are supposed to do, and by and large, I feel that our pilots do what they are told to do. Sometimes, being young, perhaps they don't. This is why we have said once or twice today if you see someone doing something that you feel very strongly is against our rules and the things that we have agreed to, let us know at least where it happened and what time it happened, and it can be done with a postcard, a telephone call or in any fashion, and if you've got that information, even if you're next week it is still possible, hopefully, to find out who did it and then we can take action. It's better if you can determine what kind of airplane, but I understand everybody is not an expert in saying that is an A-10, an F-100 or something like that. So where and when is very important. I think since Lieutenant Colonel Boucher is sitting next to me, I will let him have the microphone and he may have some things to add to that.

LT COL BOUCHER: Thank you, sir. I'm Lieutenant Colonel Boucher from the 58th Tac Training Wing at Luke Air Force Base, and if I may, I can invite you to read the Environmental Impact Statement and the pages from 4 through 18, 4 through 18, cover in pretty good detail the operations of our aircraft, both at Luke Air Force Base Davis-Monthan Air Force Base and Williams Air Force Base. I will be very brief. We operate over military training routes to an elevation of approximately 500 feet. These military training routes, some of them are on that map on the wall to your right. No lower than 500 feet on those military training routes. The circles that you see are avoid areas; we are not to fly over those circled areas at all. We have operating areas for air-to-air training, and this is above the altitude of approximately 10,000 feet through 51,000 feet, depending upon the specific airspace, and I'll be very general here. There are specific, only specific airspace where we go to to 51,000 feet, where we can operate in supersonic training, but it is not conducted below 10,000 feet above the ground. There is some low-level flying with slow speed aircraft, OB-10 aircraft and A-10 aircraft below 250 knots that's conducted below 1,000 feet and 500 feet, which is the normal area of operations for our jet aircraft. But we do have some aircraft, the OB-10 and the A-10, and I believe sometimes the A-7, but I'll let Jay talk about that, which operate at approximately 100 feet above the ground. Does anybody have any questions that they would like to go further on that? Major Miller will discuss the operations of the aircraft that operate at 100 feet.

MAJ MILLER: I'm Major Miller from Davis-Monthan Air Force Base, and I-- I'm Major Miller from Davis-Monthan Air Force Base, and I handle the low-flying operations for the 355th Tactical Fighter Wing. Our aircraft are required to flight plan into specific areas when they are low flying. We have military training routes that traverse the Papago Indian Reservation to the south, and to the north of the Indian Reservation, off the reservation property on the northern routes. Elevations on these routes can go down as low as 100 feet AGL for certain types of training. Additionally, we have a low-altitude navigation area that encompasses all the areas from the ranges to the west to the other side of the Baboquivaris, north to Robles Junction, to Picacho Peak, and thence west along to a point that connects with the restricted areas for the ranges. We have in that area circles and areas of avoidance criteria where we do not fly within these areas. The A-10 aircraft will fly below 250 knots, as low as 100 feet in these areas. They are practicing required training and instructing students. Are there any additional questions on this?

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BRENNAN HARVEY: Okay. I was looking at your map earlier, and I personally have seen these planes going, I believe, lower than 100 feet right over Topawa, the Village of Topawa, and that has a circle around it. And I wonder why, whose door? Are you guys responsible for these? I'm sure they are the Air Force.

MAJ MILLER: If an aircraft flies within a city or a village that is circled, if you would note the time, the type of aircraft--the one with the twin tails is the A-10, it has two bulges on the rear portion of the airplane where the engine nacelles. The A-7 aircraft is camouflaged and it has one single tail and one engine. If you could denote between the two that way. Tell us the time and the place. The pilots are required to tell us where they are going to fly. The LATN area is divided up into different sectors. Using this information, we can go back to our Command Post and trace down who the individuals are and find out what happened. We have your report that they did fly there. We confront the individual and find out what he was doing. He could have been lost. It's not impossible for a student advanced training pilot to lose his way...

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BRENNAN HARVEY: All right, but I see these going over at, like there's usually two of them together. Are they both lost or...?

MAJ MILLER: One is the pilot taking training; the other is the instructor pilot flying chase with him. If they fly over the area, we must know that they are doing it before we can confront the pilots with it and ask questions. We need the information.

BRENNAN HARVEY: Okay, well, I just wanted to say like they've been going over Topawa for, up just recently they've quit, since, I guess, this publicity started going out about this meeting, and I know that there's people down there that's telling them, say keep away, since maybe they saw Sister or somebody on the news, and I just wondered if--I know that you guys can get them to stop, and I just hope maybe you guys can try to get them to stop because of this meeting.

MAJ MILLER: The telephone number of the Base Command Post is 748-3121. If you seen an incident happen that you think is improper, please call and give the information we requested. I assure you that we will investigate it and either communicate with you directly or send a letter stating what has happened and what we have done to alleviate it. Our Wing Commander has given Chairman Williams his personal telephone number and has said that any phone calls to the base about a complaint like that will be accepted collect. We will pay for it.

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VERN SALCITO: Where you're training for the low-flying, you know, teaching them, why can't you fly over the gunnery range and tell them to stop shooting for target practice for now and fly over there low?

MAJ MILLER: It is not my position to answer this. I will refer the question to Colonel Smith, if you please.

COL SMITH: Okay, I'm not sure whether everyone understood the question, but I will go ahead and answer your question. In the Tactical Air Command I suppose we use more airspace than all of the rest of the people in the military, Army, Navy, other Air Force Commands put together, and I think right now would be a good time to assure you, despite your perception or belief to the contrary, that the Papago Nation is not treated as second-class citizens. I can assure you that these low-flying airplanes are over North Carolina, Tennessee, my home state of Alabama. My grandfather, who's 90 years old, has the same problem you have. But we treat everybody the same and we try to listen to everybody's complaints and respond to them. Now,

the question is why can't we fly really over Gila Bend Range. Now, Luke Air Force Base and Davis-Monthan Air Force Base, and to some extent, I believe, the Tucson Arizona Guard and other people, are all scheduled to use the Gila Bend Gunnery Range and there are so many people who have to use it so often, that honestly, there is not enough time for them to use that and then do the things that we're doing over Sells. I guarantee you that if there were enough time without disturbing your peace and tranquility, we certainly would do it. Believe me, we have the same complaints everywhere. In south Texas sometime soon I'm sure I'm going to have a meeting very similar to this for very much the same reasons. The question is why can't you do it someplace else. There just really is no place else that is not already being used, and I would love to be able to do it over Tucson, except obviously over Tucson, if an airplane has trouble, he's probably going to land on somebody's house, as happened a few months ago. In the desert, if he has trouble, he can stay with it a little while, guide it away from a building if there is one there, and still jump out. The airplane is gone, but the pilot can save himself and he doesn't have it run into any, you know, anyone or anything. And this is why we really don't do it over the cities. We are forced to go someplace where there is not much aircraft traffic, because we don't want to be doing this running into airliners with 300 people aboard, which we might do. We don't want to do it over the big cities, because if the airplane had trouble and crashed, it would be a real tragedy. Here we can avoid running into houses if we have trouble, so it's much safer. But there is too much training to do it all in one place. It's all spread out.

112 → JOHN HARRIS: My name is John Harris; I live in Sells, Box 154. I'm an attorney for Papago Legal Services. I have two separate questions for the Air Force. The first one concerns what has just been talked about here. It's my observation from my limited dealings with the Air Force that it is a military organization: it communicates rather well among its various branches and among its various echelons; that it has all the modern twentieth century capability to effect these communications. Furthermore, it is an organization based on discipline, discipline of people in the lower ranks. They are ostensibly required to follow certain behavior, certain behaviors when they are in the Air Force. On the other hand, the Papago People are in numbers not a large tribe, though they cover a large area. Many of the Papago people live at quite considerable distances from the nearest telephone. Furthermore, we had a gentleman here, a physical therapist named Seldon Wasson who spoke at the start of this afternoon, who detailed some of the difficulties he, as a veteran, has encountered in trying to make what for him ought to be a routine administrative communication. Considering the far-flung nature of the Papago Reservation, the numbers of people who are nowhere near telephones, and the difficulty that people who are already sophisticated have experienced in communicating, and weighing that against your own capability for communicating and your own capability for enforcing discipline when you have a massive amount of testimony which indicates that this 100 foot ceiling, or floor, excuse me, in particular is being routinely broken, and I've talked to women who have seen the planes come in 15 feet above the ground, between the houses in the village, who ask me, "Do we have to have people killed out here?" So my first question to you is, in light of your capability and your situation as opposed to the situation of the Papago People, do you think it is realistic or fair to require people to report to you these incidents, when we've had a massive outcry and which indicates to you this should be investigated and disciplinary measures should be taken evidently more routinely than they are. That's my first question.

COL SMITH: Do I understand, John, that you believe that we have the capability of knowing what these people are doing without these reports?

JOHN HARRIS: Sir, I believe that you have the capability, if you are aware of a general situation, to make the appropriate inquiries and to

enforce your own regulations and flight training manuals with a little bit more enthusiasm or vigor, or whatever the word is.

COL SMITH: Do I have a volunteer to answer that question, or do you want to stick me with it?

CAPT BEGGERLY: I'm Captain Jim Beggerly from Davis-Monthan Air Force Base. I'll answer it in part for the Commander at Davis-Monthan. When publication of this hearing was noticed in our newspaper, our Wing Commander, Colonel Dugan, sent a letter to the Chairman here. I assume you received it. And in that he stated that he is not personally aware of any violations of the rules out here by Davis-Monthan airplanes. Now, like I say, I answer that in part. The communication simply has to come back to us from those people who see what they feel is a wrongful maneuver, in order for us to check it out.

LT COL BOUCHER: In part, another portion of your answer is, since this public hearing today, at least I personally have observed a communication problem between the Air Force and the Papago Nation, and I think that we're going to have to go back and we're going to have to study this, because it isn't just as simple as picking up a telephone. And I think you have made a good point and it's something we are going to have to study. And I promise you that when we get back to the base, we're going to look into more ways to communicate with you, and we now understand there's a time lag problem. We would like to have our information within an hour, two hours or a day, but that's impossible; and we're going to have to live with that and we're going to have to make our rules change and bend to your problem areas. And we'll look into it when we get back.

COL SMITH: If I may expand just a little bit, John, I'm sure that you have studied a certain amount of child psychology and other kinds of psychology and that the certainty and the immediacy of punishment, if you wish to use that term, is one of the surest deterrents to aberrant behavior, and we can't really categorically call all of our pilots misbehavers. Having once been a young pilot in my own day I think our tendency to break the rules is far greater than what I perceive it is in our pilots today. However, the fact that some people will do it, obviously, I think you would agree, I cannot categorically say, "All of you guys have really screwed up and I'm going to get you all." But if I can catch a few and get the rest of them to know that something is happening, they are going to get caught, I can assure you that the instances of real violations will virtually cease.

MR. JOHN HARRIS: I agree with you that that is the preferred way of dealing with it, and I appreciate the frankness of the gentleman who spoke before you, that we simply don't have the preferred way here and we have to make do with what we can, but thank you. My next question--I'm not sure if you have a representative there from Wright-Patterson--okay, my next question is directed to that representative. On page 41 of your Environmental Impact Statement on the bottom, the statement mentions a team from Wright-Patterson which came out in December of 1977 to record the effects of sonic booms on a typical adobe structure in the Sells area. Well, that typical adobe structure was my house, and I got to know these guys while they were out, and we talked. And I can remember whoever the--one of the two gentlemen coming back to me after meeting someone at Davis-Monthan in the Tactical Air Command, and saying, "Gee, I just talked to somebody there who seemed very hostile to what we were doing out here, and I just hope I did the right thing by talking to him." And then about three days later, after some uncannily quiet days in December, the same guy came over to me and said, "Gee, I really feel I did the wrong thing by talking to that guy. I know they know we're here and I know they're staying away." Now, in the

light of these observations, I'm wondering if you think perhaps this data on page 41 of your Environmental Impact Statement might be deficient and perhaps a longer period of time might be in order to study these things. That's my second question.

COL SMITH: Where's-- Dr. Nixon.

DR. NIXON: I'm Dr. Nixon from Wright-Patterson Air Force Base, but I work in the area of effects of sound on people and not in physiological, or not in structural responses. We have no one here who was a member of that team or who is from that particular laboratory. I think Colonel Johnson may have talked with them. Do you have anything that you would like to add to that? Other than the fact that I agree that probably one week is not a sufficient time to monitor. Colonel Johnson and I accompanied Captain Gauntt here for a two or three day visit back in October of 1977 for the specific purpose of experiencing sonic booms and we came unannounced, except to Mr. Ulmer who made the arrangements for us. And we traveled to probably six or seven of the communities, and in all of the time I was here I heard no sonic booms. So I was rather disappointed myself. I'm sorry I don't have an answer that I can provide from the group, but I would agree that probably a period of time as short as four or five days probably would not be representative, because of the intermittent nature of the scheduling, as I understand it. Does that satisfy your question?

COL SMITH: I think Captain Gauntt would like to add something to that.

DR. NIXON: I think Captain Gauntt, probably Colonel Johnson, some people down here, would like to add something to it.

CAPT GAUNT: Let me just add very quickly. I'm Captain Gauntt and was responsible for that team coming out here last December. I asked them specifically to come out here for a week, and they adjusted their schedule to do that. We were very disappointed. I did not tell anyone that they were coming out here. The truck showed up out here unannounced and, as you said, instrumented your house to record sonic booms. We were very disappointed with the results. The fact is we only got one good sonic boom that we recorded, a substantial sonic boom. We did hear two or three other minor ones, but they were not of sufficient overpressures for us to get any good readings on. But does that help answer the question? We did not try to bias it in any way; in fact, we tried to go the other way. I did not tell anybody from Davis-Monthan or Luke that the truck was here, so that we would try to get as realistic as possible of a picture. Colonel Johnson works with Dr. Nixon at Wright-Patterson too.

LT COL JOHNSON: Well, there is one other thing that we tried to gain with this team that came out here, and the question was was adobe structures any more sensitive than normal construction? Unfortunately, with just one sonic boom, you really can't make a positive statement. But there was no surprises with the relationship of the boom that we did get with the response of the adobe structure. Other than that, it appears that adobe structure is not super-sensitive from what we would have seen from that one exposure.

COL SMITH: John, I'm going to add just a little bit more to that, because there is implied, if you would, the possibility of a certain lack of integrity if the test were compromised. In the first, I would like to address the possible lack of integrity. As an Air Force officer, I strongly question the likelihood that, even had the Commander of Davis-Monthan or Luke or whomever learned of it, that he would have done anything to compromise the test. I have known too many of these people who would not have done that, and I strongly doubt that it was anything other than an unfortunate coincidence that you did not hear any more. In other words, Dr. Johnson's instance

of a week out here and only hearing a very few, it's just that's the way the cookie crumbled that week. If, and I cannot obviously commit the major command or the Wright-Patterson laboratories to another effort, but if they should ever decide to do that, if they will go through my office at Twelfth Air Force and let me know about it, not only will we not compromise, I would say that we will make a wholehearted effort to see that your house is destroyed, if it is possible. You will have to sign a waiver holding us non-labile.

CHAIRMAN WILLIAMS: Dennis.

DENNIS ORTEGA: My name is Dennis Ortega from Sells, and I would like to ask a question of why this part of, portion of the meeting isn't being translated for the Papagos, as it was being translated into English for you people at the beginning of the meeting. That's all I have to ask.

INT: Okay, I guess I'll say it first in English and then in Papago. The reason why is that as it goes along with the questions and answers, that they are coming across a lot faster than they were before. People tend to lose their thinking when it comes to that, or their answers or whatever, and it gives these people more time to think about their answers if you translate. So if you put them on the spot right away, then they tend to answer better. (Translation into the Papago language.)

(Translation of the prior untranslated portions concerned with Mr. Harvey's question and the ensuing proceedings.)

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DELMAR FASTHORSE: My name is Delmar Fasthorse from Covered Wells Village. About four years ago we had a new home built up in Covered Wells, and 9 o'clock in the morning, February 10th, 1975 there was a big boom, sonic boom, and I heard a crash. I went out in the hallway and here my light was laying on--light fixture was laying on the floor. Then I looked straight ahead and there was a big crack in the wall. So I went down and I got witnesses, had pictures taken, because four days before that I had plaster on the bottom there and there was no crack then and I had witnesses there too then. Anyway, I went through the legal aspects, went all the way all through the channels through legal aid. Then the personnel came out there, Air Force personnel, and they were there about 15 minutes; and while they were there inside the house we had a big sonic boom and it shook all the personnel up, because it shook the building also. Well, anyway, after they left, we waited for quite a while before we got a answer. When we did, they said it was caused by settling of the ground. But the point is, what I'm trying to point out here is that they had their own engineer there to inspect it. Why couldn't they get a civilian engineer who would have been impartial to both of us? Thank you.

(Translation into the Papago language.)

COL SMITH: Captain King will answer that one.

CAPT KING: First, I'm Captain King again from the Claims Office at Davis-Monthan. We were looking at your file before we came down. As I recall, you had a structural damage claim and you were building a new room on your house and you claimed damages which exceeded that \$2500 amount which is our local settlement authority, so your claim was forwarded up to higher headquarters and action was taken on it at that point. Let me bring out this aspect of the claims process, because I think probably there's some confusion over it. When you submit a claim to the Air Force, there's a very good possibility that we'll disagree about the amount that you should be compensated. In the event that that happens, you have a right to bring your claim again in the United States District Court, to bring a claim

against the government. You don't simply have to stop with the Air Force's determination. If you reach that point, you should consult an attorney, perhaps one of the tribal attorneys here or whomever you would choose, and seek an attorney to bring your claim and see if you can get an increased amount of compensation from the United States District Court Judge, or the jury there. But it's necessary first that you submit your claim to the Air Force to give us a chance to settle it out of court and to keep you from having to go through the expense of hiring an attorney. Does that answer your question?

COL CORDINGLY: Captain King, he wondered why they couldn't hire an independent CE.

CAPT KING: Well, we usually bring our civil engineers out to examine it, simply because it's convenient. I would imagine that you could request a civil engineer and we would consider that request. You are always at liberty to get a civil engineer to submit an alternate estimate of the damages, which we would consider as well, based on that particular individual's expertise in the field of engineering and whatever particular findings he made with regard to your particular claim. We are always welcome to that. I can't say in any particular case whether we would provide a civil engineer outside Air Force channels, but we would certainly consider that request in any given case.

(One of the Air Force officers:) That's one other thing. If we hire a civilian civil engineer, he would still be on our payroll, so you've still the problem.

CAPT KING: Most of the engineers in the Air Force are civilians anyway. They're not uniformed service members. Most of the civil engineers at Davis-Monthan are general service, GS employees. Mr. Lamm here, who is down from San Francisco, is a civil engineer and he's a civilian.

DELMAR FASTHORSE: This engineer you had here was in uniform.

115 → CAPT KING: He might have been from the Civil Engineering Division as an inspector, but I doubt very seriously that he was a civil engineer. The only engineers that I know of at Davis-Monthan are Mr. Love and Mr. Moore and Mr. Thompson, and those are all three civilians. Now, perhaps your particular claim covered a time when there might have been a different engineer, but at the present time at Davis-Monthan most of our engineers are civilians. As a matter of fact, I don't know of a single uniformed engineer.

DELMAR FASTHORSE: He never made us aware that we could get a civil engineer or anything, because he just gave us about a day's notice and he was there next day.

CAPT KING: Well, in adjudicating a claim, if you want to get a civil engineer or make a request for another engineer you can always submit that request and we'll consider it, even after we've come out and made an inspection. So if you have a situation like that, contact the Air Force and make your request and we'll give it consideration. And if you don't think we gave you a fair deal on it, then you should go to the United States District Court.

116 → DELMAR FASTHORSE: I had one more part to that. When the people were, when they started those sonic booms on the reservation, did you make the people aware? Did you send the experts out to each village and tell them what will happen, results and all that, so they will be aware of it. If so, when; if not, why not?

(A discussion between two Air Force officers, inaudible to the reporter.)

(Translation of the questions into the Papago language.)

COL SMITH: This question is still to be answered? I'm not certain that I fully understand that question, Mr. Fasthorse, Delmar, but if I do understand it it's did we make the people aware of what they needed to do in order to prove their claim?

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DELMAR FASTHORSE: Before you started the sonic booms on the reservation, did you make the people aware with your sonic experts what will happen, what the results will be, the structural damage it will cause? If you did, when; if not, why not? Because the people are entitled to it.

COL SMITH: The answer to that question, as I got it from Captain Gauntt a moment ago--he understood it better than I apparently--the answer is no. At the time that the sonic booms were first made, there were no rules that required any notification of anybody to do the things that we were doing. This is something that has just within the past few years become a requirement, and therefore that is the answer, no, we did not and the reason we did not is because it was not required at that time. Do you recall when this began? (Response from Capt Gauntt inaudible.) It would have been required if we had started doing it after the first of January 1970, we would have had to tell you before we started. Since we were already doing it, as I understand the Act, it was not necessary to tell anyone about the things that we were already doing. But we did do the, yes, we began the process of the Environmental Impact Statement, but it was not necessary to stop doing what we were already doing. In other words, anything that we had done already according to the law we could still continue to do, but we did have to prepare an Environmental Impact Statement to show what effect it was having.

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DELMAR FASTHORSE: Ain't that a violation of human rights? Ain't that violating their human rights?

COL SMITH: Apparently not.

DELMAR FASTHORSE: I'll give you an example. I'm an Environmental Health Technician and all these sonic booms are breaking a lot of windows, and there's people that go to town and buy windows and they come back and have them put on. A couple of days after they are broken again, so they try clear plastic, and they have a big wind come along and tear that plastic. All right, they put boards on. All right, in the winter months they have a lot of cold air, it's drafty. There's a lot of sick babies, a lot of sick elderly from that, account of the sonic booms. Now, do you agree with me?

COL SMITH: Was this circumstance of all these breakages made known?

DELMAR FASTHORSE: Those are just some of the high risk areas I investigated.

COL SMITH: I would say at this stage that before we attempted to answer the question directly, is this or is this not a violation of human rights, I think that's an extraordinarily broad question. The purpose of the environmental assessment is to answer all manner of questions in a very orderly fashion, and I think it would be presumptuous of me to pretend to know the answer to that particular question. However, it will be one that is posed and if someone is smart enough to give you an answer to that one, then you can expect it. Let's... I would make this point, that what you might feel is a violation of human rights, someone else might just as legitimately and properly feel it not. In this particular case, I wouldn't even hazard a guess as to which way someone, any individual would say.

(Translation of the question and answer into the Papago language.)

CHAIRMAN WILLIAMS: Bob.

119 [BOB CAIRNS: I'm Bob Cairns from the Indian Health Service, and I have two fairly quick but related questions. Most of what we heard this morning and this afternoon, at least what impressed me most, was the testimony the people had about the social, cultural and potential psychological effects of the sonic booms and the low-level flying. Is this blue book, this environmental report, supposed to address itself by law to those questions?

COL SMITH: If I may paraphrase for Bill, he said that the initial portion of the testimony was to the effect of the cultural, psychological trauma involved as a result of the activities we have here, and his question then-- the question is is this book by law supposed to address such things as that?

CAPT GAUNTT: The draft statement that you have in front of you there is designed to and is an attempt at addressing the ten specific areas that are required to be addressed by the Air Force. The public law itself does not specify all ten particular areas that we are to address. We have attempted to address everything that is required to be addressed by law.

COL SMITH: I'm not sure you heard that, but one of the purposes of this meeting is to find out this kind of thing, and it will be incorporated as part of the hearing minutes in the report.

120 [BOB CAIRNS: Just the testimony or the information that came out in the hearing, or is there going to be any additional attempt to perhaps do a more in-depth analysis of...

COL SMITH: I would not anticipate a new environmental assessment. There will be some response to the questions that have been raised and the issues today. All of this will be considered in the decision-making process, before the report is made final, and all of what is transpiring here today will be available at that decision point.

121 [BOB CAIRNS: So this report may very well stand as the total effect of the flights and the sonic booms on the human inhabitants of the reservation?

COL SMITH: I think that would be stretching the point. When we say that today's testimony and questions and discussion are going to be an addendum, so to speak, to what is in the book today, then obviously what has transpired today will be being considered. In effect, the book will not be standing as it is written, it will be added to. There may be changes internally. That's something that would be determined as the analysis is made of what has been said today.

BOB CAIRNS: But we--maybe I'm asking the question wrong.

COL SMITH: Well, keep trying and we'll keep trying to answer it.

122 [BOB CAIRNS: What bothers me is that it doesn't--you know, you can add the testimony the people have made about the effects of low-level flights, sonic booms on their human environment. I'm just kind of impressed by the lack of depth or whatever that the effects of these things have on people, and I guess maybe I'm not making myself clear.

COL SMITH: I was just about to call on Dr. Nixon, but he volunteered, so I'll hand him the microphone and let him discuss it, since that's his area expertise.

DR. NIXON: Dr. Cairns, the primary reason it is not addressed in that particular statement is that in the past 15 or so years that I have worked with sonic booms, and most of the research that has been done was accomplished during the 1960s, when Russia, France and England and the United

States were attempting to build a commercial supersonic transport. During that time period, there were a series of field studies per se that were conducted over various cities across the nation and there were a number of laboratory studies. None of these field or city studies revealed or identified a psychological, emotional, spiritual type of response to the degree that it has been identified here by these people. For that reason, it has not emerged in the past as a significant factor. Because it has not emerged or was not identified, it obviously was not addressed. That is the best reason I can give you. This is the first time that I have seen it identified to that extent, and we're talking about studies such as the Oklahoma City study, in which the people were boomed seven days a week for six months, continuously, only eight a day and they occurred every morning, but these kinds of responses were not identified. Consequently, this is the reason that you see them not addressed directly in the statement. Does that answer your question.

BOB CRAIN: That answers my question better than I asked the question actually, so I'm satisfied.

INT: Okay, was that your second question or is that it? Do this first, okay. (Translation into the Papago language.)

123 MARK ULMER: I know it's late. This is a quick question. My name is Mark Ulmer; I'm the Acting Director of Papago Legal Services. I confess I'm partially responsible for keeping you here this late. My question concerns the compensation system which has been discussed earlier. In my close to three years of experience with that system on this reservation I can tell you that it is unworkable and that it is little more than a cruel joke for the Papago People. The reasons are so many that I won't bother to list them all. The most prominent one is simply lack of ability to communicate with Sells or with Tucson, and there are other factors there also. There are no telephones out here, there are very few cars. Those are the problems. We have a system that's not working. I am convinced, also based on my close to three years of experience with this problem, that the only system that will work is a system which is managed and controlled by the Papago People. Specifically, what is needed is a community education program designed and executed by the Papago People, followed up with paralegal representation by Papagos for Papagos. I would request a written response from the appropriate division of the Air Force regarding whether or not such a compensation system could be set up on the reservation, not in Tucson, but on the reservation, staffed with Papagos, managed by Papagos, controlled by Papagos and funded by you.

COL SMITH: Mark, I'm going to--that question will definitely be on the record. We will get an answer for you. I think Captain King has a few words he would like to put to the question at this time.

MARK ULMER: Before we do that, could we have my question translated. I think it gets a little boring to sit out here in a vacuum and not know what is happening.

(Translation into the Papago language.)

CAPT KING: Mr. Ulmer, as Colonel Smith has indicated, we will certainly consider this as part of the record and it will be reviewed and studied. However, in answer briefly to the question that you pose, the system of compensation that we have described to you today is not one which we invented, it's prescribed by the Congress. The Congress of the United States enacted all of these provisions by public law. They are published in the United States Code. As federal officers, we're obliged to obey the law, just as

you are in this regard. And the Congress specifically, and the Federal Courts have upheld this, Congress has forbidden us from going out and soliciting claims as government officers, because of our ethical obligations to the United States as attorneys or officers or whatever the case may be. Really what you raise is a political question and it should be directed to your elected representatives in the Congress. And if you want a different system of compensation, you should seek that from the Congress, because the Air Force is powerless to change that system. It is the law and we're required through our ethical and legal obligations to be bound by that system, just as anyone else.

COL SMITH: Chuck, before you leave, I'm going to ask, do you see any reason why our record cannot show that we will at least have our liaison people present the question that has been raised to Congress and then they can do as they would. (Inaudible statement by Air Force officer.) Yes, yes, he will get a written response to that one. Colonel Johnson.

COL JOHNSON: To make it a matter for the record, from our visit here about 16 months ago we observed the problem of broken windows that remained unrepaired. There's far too many broken windows in this area, obviously a lot of those are sonic booms, and if you just take a simple engineering calculation that's in the EIS guidelines, I think the tenth grade student can come up with an estimate of the number of sonic booms—or the number of windows that might be broken a year are something like a hundred, and obviously not that many claims are being paid. We recommended that somehow, if it's possible, and of course, I'm just making the suggestion, but we did make this a formal suggestion through a letter to TAC, which I think ought to be a matter of the record, that if you could just bring someone out here that would glaze windows every so often, this is what I would like to have in my home if someone broke my window. I want to call up, have someone come out and repair the window. And I think the Papagos would be fully right to insist on the same thing. At least this is the simple-minded approach that I think would help the situation immensely.

124 [ROSE MARY LOPEZ: (First a portion in Papago.) I am concerned about the area that I brought out in my testimony, you know, the psychological measurement that is harming our children. How do you intend to address that area? Not only our young children, but our elders.

COL SMITH: I believe Dr. Nixon has made an answer to that general area. If you're speaking compensation for damage, is it a question how do you get compensated?

ROSE MARY LOPEZ: Well, I'm not concerned about the compensation. I'm concerned about the problem, the problem of the psychological harm that it's doing to our children, in terms of stopping the flights or whatever.

DR. NIXON: To be perfectly frank, I don't know how to address that, because in all of the experience that I have had related to the exposures of communities which involved children, we have not had this problem arise, or this problem has not been identified. Now, I'm not suggesting at all that I'm disagreeing with you or that it is not a problem here. I am simply saying that it has emerged for the first time today, and it's not something that can be resolved simply by having me respond to your question.

ROSE MARY LOPEZ: I guess I would like to respond to that in saying that that is a very good example where apparently it's not happening anywhere else except here, because, I mean, it hasn't emerged as a problem—it has emerged as a problem. I'm telling you that, but it's been going on for some years now. And I am concerned about, you know, what impact it has made on our children in the past and what it's doing to our children now.

DR. NIXON: Well, I think the gentlemen over here who have taken the child psychology courses and all will tell us that children are extremely adaptable and that I don't know that we have really firm evidence that there are adverse psychological effects that are going to occur. Now, certainly, your children are being startled. My child has been awakened by sonic booms, and he has-- I have had him come running to me screaming because he was awakened by sonic booms. But at this point in time, I do not have an answer to your question at this point in time is what I'm telling you.

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ROSE MARY LOPEZ: There are about 50,000 sonic booms a year here compared to a possibly three in Tucson, and I don't know what big city you're from, but I doubt that they would have the same kind of sonic booms that we are experiencing here. And you know, this could be an argument ongoing, but I want to make sure that it's addressed, because it's very--all the, well the whole testimony today is all very important to us, but I'm particularly concerned about that area, because these are our future leaders. You know, what harm is it doing to them?

DR. NIXON: The purpose of the testimony today is to identify problems of this type that may have been overlooked.

ROSE MARY LOPEZ: My concern, you know, is that, yes, there's not--the feeling that I got was that there was not going to be a great change made in that report, an addendum, which means that behind the report. I hope that it's put, you know, before the report, so that when it's presented before whomever, they can read that first before they read the one-week study that was done here. Thank you.

DR. NIXON: I'm sure that there is no possibility that a substantial research program will be completed in time for this kind of thing. The impact of these kinds of things on individuals may be considered and included in response to these kinds of issues that have been raised. The extent to which they are responded to, I think, depends upon the agency primarily responsible for the impact statement. I assume they will be coming back to us for whatever assistance we can provide as well.

ROSE MARY LOPEZ: Again, just so that I have the last word...

DR. NIXON: That's all right, that's all right with me.

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ROSE MARY LOPEZ: You know, that was a one-week study and I thoroughly agree with the people that were saying that that is not enough time, one week of evidence that's going to go before a department that's going to make decisions about our being here on our reservation. And another question just popped into my mind which I happened to be thinking about, what agreements were made, you know, what kind of agreements were made or what was the procedure established, or how was our reservation chosen to be the flight routes?

COL SMITH: Rose Mary, do you want me to answer that, or do you want me to let you have the last word?

ROSE MARY LOPEZ: Answer it, so I can have the last word.

INT: I will have to go back to the beginning. (Translation into the Papago language.)

COL SMITH: All right, the real question, Rose Mary, is how did the Sells Reservation become the playground for all these airplanes, and the best answer I can give to that is really broken into three little parts. One, it just happened because of the geographic location of the reservation between Davis-Monthan in Tucson, Luke up in Phoenix and the Gila Bend Gunnery Range, which, as you know, is still west of you; that the things

that they needed to do in order to get to Gila Bend led them through Sells. And it started, of course, many years ago, probably in the Second World War, before I was old enough to know what was going on or you. But it has continued and kept on going. Then again, there are several things involved here, the National Environmental Protection Act, of course, made it necessary to tell people what will happen for the things that we are going. The Federal Aviation Authority, which manages all of the American airspace, came up with some new rules which said that it's necessary to draw a line where you are going to do all of these things. We never had to do that before about 1975. But we had been doing all of the things that we are now talking about probably starting some time between 1962 and 1969, according to Mr. Brown, who left Luke Air Force Base, I presume, in 1962 as a military person and came back in 1969 as a civilian Airspace Manager. When he came back in 1969, the supersonic was already happening over Sells. So some time between 1962 and 9 we know that the supersonic started. It just happened that that's when the airplanes started going faster than sound that were based at these locations. It might have happened earlier if the airplanes had gotten fast earlier. But all of this is still, essentially it's an accident of geography and yet, I don't know really how to change the geography of Arizona or the placement of the bases now. I wouldn't hazard too much of a guess, but I suppose four or five billions of dollars are probably invested in those bases and this is about what we are paying, you know, to have peace between Egypt and Israel. But it just happened.

ROSE MARY LOPEZ: I would just like to make a comment that, you know, our tribal, the tribes across the nation have sovereignty and part of our sovereignty is what we say what is going on in our land, and this is one and has been one of the questions that, you know, since this is our land, we feel that the sky is a part, your know, of our sovereignty, and I'm sure that eventually that needs to be answered legally in court or wherever we need to take it to get there. (Speaking further in Papago language.)

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MILTON BLAINE: My name is Milton Blaine. My address can be reached through Mark Ulmer. I am from the Schuk Toak District. One of my first questions is when this area was designated as flight patterns, flight areas for the Air Force, who designated these communities to be circled as areas to be left alone, as not to be flown in and this and that? That's my first question.

WALT BROWN: As I understood the question about when the small circles around places like Gu Vo or someplace like that, Hickiwan, were worked out to where we would not fly over those areas, is that correct, sir?

MILTON BLAINE: Yes, sir.

WALT BROWN: I was not present. The only thing I can say is what one of my ex-bosses, who has since retired, told me, that he and Mr. Mark Ulmer and some other parties which I do not know the names of, decided on these areas. These were areas that were designated as sensitive and we were not to fly over them with military training routes at a very low altitude.

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MILTON BLAINE: Well, the recommendation that I would make right now is that you people get together and you start circling all these other communities, because they are sensitive areas and this is what's coming out now. My second question is—Mark wants to say something.

MARK ULMER: Very quickly. I was there. The scenario was as follows: A Colonel Stitsel from Davis-Monthan presented me with that map with the circles already on it. My file notes indicate that my response was, "This is a good beginning; it is not enough."

(Translation into the Papago language, beginning with the last response to Ms Lopez' question and to the current statement of Mr Ulmer.)

MILTON BLAINE: My next question is several months ago I was invited to attend a meeting with Mark with some of the staff from the Air Force. At that meeting I went on record as to invite members to my area to tour our area at a time when the cowboys are working. And as a matter of fact, at any time, because as it is known here on our reservation, we have cowboys that are out on the range seven days a week from sunup to sundown, and I made that invitation to the gentlemen who were at this meeting. I do not recall the date, I do not recall the names, but I am on record as having invited these gentlemen or anybody from the Air Force to come and tour with not members of the tribal administration, but with members just from the people that live in the communities. And I would like to know--I see heads shaking--I don't know anything about it--don't ask me--but I would like to know just what happened, because I've been waiting and I have talked to Mark on several occasions as to has he had any reply to that, and to this date as we were sitting here in this audience, we said that I would ask the question and I hoped that we could get an answer, and I want you to know that the invitation is still open. And I hope that a member from the Air Force takes us up on it, because this is one way that, as we all know, you will see for yourselves just what we have to go through on this land. Thank you.

(Translation into the Papago language.)

COL SMITH: Major Miller, did you say you wished to answer that? Do you know anything about that meeting?

COL CORDINGLY: Before we proceed further, I would like to remind all of the parties that this is the question and answer period. We previously had a period reserved specifically for making statements. Now we are in the question and answer period. I will remind you of my earlier instructions, that argumentative type questions are not appropriate. So-called questions that actually are nothing but a statement of opinion on the part of the speaker are not appropriate, and it's not appropriate to try to cross-examine any of the speakers or any of the representatives of the Air Force. We will do our best to answer direct questions, but we simply can't let this deteriorate into another statement period, or we'll never get out of here tonight.

COL SMITH: Mr. Blaine, you say you can't recall the date of this invitation. I'm going to inquire of Mark if by chance he knows when and with whom you met.

MARK ULMER: No.

COL SMITH: Well, no one is questioning whether it happened or not, Mark. I believe the truthfulness of the individual who spoke. Obviously I wasn't there. I would remember it too. You were there, you say it happened. I'm not sure whether any of these other individuals were. The important thing is I accept the fact that the invitation is still open. It will be presented to the appropriate people at both Luke and D-M and I assume that through Mark is the best way to get in touch with you. I appreciate the fact that the offer is still there.

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HARRIET TORO: After that last statement it just wiped out what I was going to say, but I still have a question that I had asked earlier when I made the statement. Are there any bombs being carried on these planes?

(Translation into the Papago language.)

LT COL BOUCHER: The answer to your question is that from time to time our aircraft carry practice weapons from the bases, primarily and probably--

no, I think they also come out of Williams also with a practice bomb dispenser--Luke, Williams and Davis-Monthan Air Force Base transit this area on their way to the Bomb and Gunnery Range at Gila Bend. They carry two types of dispensers, both dispensers carry approximately six practice bombs. These bombs are non-explosive in nature; however, they do weigh about 25 pounds, approximately 25 pounds apiece. They do, in fact, have a spotting charge. The spotting charge is white smoke, which is used on the gunnery range to plot the location of the bomb when it strikes the ground so that they can get an aerial score for the pilot. The bombs are two types, one is a cylinder type, it's orange in color. The other is blue, and it resembles a small tiny bomb. And I might emphasize again neither of these are explosive in nature; however, the spotting charge does require some care, so if anyone locates one of these little practice bombs, and I'll show you what they--I'll measure them with my hands--they are approximately that long (holding his hands about a foot apart) and they are probably approximately that big around (making a circle with his hands of 4 to 5 inches). They are very small. Now the spotting charge approximately would resemble the power approximately of a cherry bomb, if anybody is familiar with that type of firework. That's why it's precautionary when you handle these things, that the spotting charge may still be in them. The aircraft are inspected by the crew prior to taking off the ground when they have these dispensers on the airplanes. They are again inspected in the arming area prior to takeoff to insure that the weapons themselves are secure. Once airborne, each aircraft inspects the other to insure that all their armament is aboard. None of the switches are on or touched until the aircraft arrive at the gunnery range, so in fact are safe all the way through the airspace. Do you have any other questions, or does that pretty well answer it?

HARRIET TORO: Well, I have another question, but I don't know--Andy, do you want to go ahead and interpret what...

(Translation into the Papago language.)

130 [HARRIET TORO: I want to be assured that the communities that I named in my earlier statement will be circled on the maps that you have on pages 11, 12 and 21, and I just want to repeat again that is Vamori, San Miguel and New Fields, and I want to know who, you know, who's going to do that or who will assure me that it's going to be done?

(Translation into the Papago language.)

COL SMITH: The names of the villages will be taken. I don't believe there is anyone who can guarantee you that every village that someone would like to have circled is going to get circled. Our understanding of the agreement is that, you know, the Papago Nation would like to have a circle drawn around the Papago Reservation. That would be the very good solution. The Air Force's desire would be no circles at all. Therefore, there is a compromise, that the Papago Nation has the option to determine some areas that they consider very sensitive, they nominate those that they consider the most sensitive. It would be very easy for all places to have circles, so that all of the circles overlap each other and therefore, in effect, the Air Force has no airspace, which is what the Papago Nation wanted originally--and we have no compromise; we have somebody won everything, somebody got nothing. The names will be taken under consideration. They will be discussed in the action group which has been mentioned, which we have attempted to have meetings in that over the last seven or eight months and have been unable to find time. If everyone in the Papago Nation feels that these are the villages they desire, rather than some others, then it's possible that they may have circles. I cannot guarantee you that these specific villages will have circles.

HARRIET TORO: The reason I say that is just by looking at the map on the wall, that that's just one district where no major villages are identified,

and yet on page 33 you have Vamori as one of the villages that are affected by these supersonic booms, and yet you're the one that are documenting this in your booklet, and yet you're not—it's not corresponding with the other map. I just wanted to point that out, that you've identified it already in one map and yet you've neglected it in the others. I didn't really have a chance to really look over that impact statement, but those are some of the things that I caught, mainly because, you know, we are more aware of the areas that we represent.

COL SMITH: I'm going to let—Colonel Boucher would like to say something.

LT COL BOUCHER: If I may correct you. Between the maps you selected, one is where the overlapping sonic boom areas primarily take place. That's one of the maps that you indicated. The other, the cylinders that you're asking don't have anything to do with sonic booms. They are areas where we restrict flying aircraft. So, do you understand that?

HARRIET TORO: Yeah, I understand it, but I guess I just see it as one whole problem, because I know that those planes go over those villages. I have seen them myself.

LT COL BOUCHER: Agreed, and I think that it's arbitrary, but we will look into the problem of circling those facilities you mentioned, Vamori, San Miguel and Choulic. I just want to make sure that you understand that that doesn't preclude a sonic boom in that particular area.

131 [HARRIET TORO: Well, you know, like I say I'm, you know, I'm not that familiar with that booklet. I just glanced into it. But those are some of the things that I identified as being problems, being that I do represent, and Rose Mary and myself, we do represent that area. And the other question I have, since I was going to make a statement, but I'll turn it into a question, is what you're saying in 6.2.1 and 6.2.2 on page, I believe it's 54 on the physiological and psychological effects. Did you get anybody that is recognized by our people as experts, namely the medicine men? Did you get their opinion in coming up with the statements that were made?

COL SMITH: Captain Gauntt, do you have an answer to the question of whether or not a medicine man was inquired of as to the impact physiologically?

(Response inaudible.)

COL SMITH: I think you see that the answer is no in terms of the medical input to this; the medicine man was not consulted. Is that a correct answer, Captain Gauntt?

(Response inaudible.)

HARRIET TORO: Yes. Okay, again I just wanted to state that to us they are equivalent to what he is equivalent in your society. Thank you.

(Translation into the Papago language.)

CHAIRMAN WILLIAMS: (Speaking in the Papago language.) Lawrence.

132 [LAWRENCE COSE: One question, what happens now? You've got the testimony, you've sat here all day, what are you going to do with it?

COL SMITH: Captain Gauntt?

CAPT GAUNT: Captain Gauntt is my name and I work in the Environmental Planning shop at Headquarters Tactical Air Command. What we will do with

this data now is use the transcribed recording, the script of it will be included with this document. It will be given to the people at Luke Air Force Base, who are the responsible agency for preparing the assessment. They will revise it--I said assessment, the statement--they will revise it in accordance with the ideas that are brought forth here today in this meeting. They will take into consideration some of those factors that have not been taken into consideration here. It will be looked at and reviewed by several other people and agencies. It will be returned to our headquarters in Washington. It will be looked at there and certified once again before the final decision is made, as to whether we continue these operations or not. At that time it will be given to the Environmental Protection Agency in the form of a Final Environmental Impact Statement. Does that answer the question?

133

LAWRENCE COSE: Do we have any assurance that this is going to be done? Any documents?

CAPT GAUNTT: Yes, the documentation will be provided back to you; you will receive a copy of the final document.

(Translation into the Papago language.)

CHAIRMAN WILLIAMS: Robert.

ROBERT CRUZ: Yes, I wanted to make some comments, but I know that there is no time now for that, so I did try to change my comments into questions and many of them have been answered.

COL CORDINGLY: I might point out, I don't know whether you were here early this morning or not...

ROBERT CRUZ: I was here since the beginning.

COL CORDINGLY: You have the opportunity to put any of your comments in writing and furnish them to either of two individuals and they will be incorporated in their entirety in this record.

134

ROBERT CRUZ: I wanted to ask you, or whoever would like to answer the question, there is supposedly some relationship with the Department of the Interior and the Papago People in this area, and I just want to know whether you people have consulted with the Department of the Interior and what have you done about it? I just don't think that we are getting any support from that branch of the government.

(Translation into the Papago language.)

CAPT GAUNTT: This Draft Environmental Impact Statement were supplied to Department of the Interior in Washington. In fact, about 20 copies were provided. They were asked to comment on it. If they had any comments, they will supply those comments back to us prior to the end of the public comment period. From the start of the public comment period, which was originally 9 February until the end 14--excuse me, the 2nd of April, which has subsequently been extended two weeks--they will have until the 16th of April to provide comments back to us on this document.

COL SMITH: Mr. Lammi.

PHIL LAMMI: I have been advised by the Assistant to the Assistant Secretary of the Interior that they do have comments and the comments will be forthcoming. The person who gave me this information is Patricia Port, based in San Francisco, so there will be comments and you'll see them in the final.

135

ROBERT CRUZ: I also want to find out how much it costs for one of these jets to fly over Papago every day. I don't know what good it does, but I just wanted to ask that.

LT COL BOUCHER: This is going to be a tough one. The operating cost for an F-4 is approximately \$1200 an hour. The operating cost for an F-5 is somewhat less, somewhere in the neighborhood of \$350 an hour. I don't know what the cost per hour is of an F-15, an A-10 or any of the other aircraft, but let's just choose an F-4 as an example. It takes approximately 30 minutes to cross the Sells airspace on a low-level, low-altitude training route. That would be the longest we would ever spend in that particular area, so that's what the cost factor for an F-4 is half of \$1200, \$600.

136

ROBERT CRUZ: I also did read at one time that there was an agreement made between the United States Department and the United States Army Air Force and the Papago People that they could borrow as much land as was needed for the Second World War and that they could borrow as many young men that would be necessary, but that they would have to be returned at the end of the Second World War. Can you answer when that Second World War ended? Is it still going on?

COL SMITH: Anyone have an official answer to that? No one here has an official answer. My personal opinion is the war has been declared over but we'll take that question and we'll get an answer back to you, Robert.

ROBERT CRUZ: The other one is that I do think that people in this area consider mutilation of human beings an immoral act. It's dirty, it's nasty, it's unethical...

COL CORDINGLY: I would ask you to please limit yourself to questions.

ROBERT CRUZ: Yes, I'm trying to phrase it in a question, since I was not able to bring it out in the form of a comment.

COL CORDINGLY: You may proceed.

ROBERT CRUZ: And I wanted to know if you, as people of this country, who act and say that you do represent the government in whatever form that you do act as you are, will you--you say that you represent what you do, and your acts, it seems to me, are unethical and immoral and are causing people in this area to think that the United States Government is acting in that manner. Now, what are you going to do about it? I know that you...

COL CORDINGLY: The question by the speaker is not relevant to these proceedings. If you have a relevant question, you may ask it. That question will not be answered.

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ROBERT CRUZ: How much of a reduction can the Papago People expect in the sonic boom noises in the future?

COL SMITH: Robert, have you read the existing Draft Environmental Impact Statement?

ROBERT CRUZ: I haven't received a copy.

COL SMITH: Would you provide him a copy? It's on page 18, 2.3.

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ROBERT CRUZ: Also earlier it was just mentioned that the sonic booms did not begin a long time ago. I also know that the low-flying aircraft activity did not begin just recent, just not a long time ago, it just started recently. Now, why is it that it didn't begin a long time ago so that we could have dealt with it at that time?

LT COL BOUCHER: I'm not sure that I can answer this entirely. Part of your question concerns the type of aircraft that we have in the inventory and at a specific point in time. The A-10 and the OB-10 are the two aircraft that fly at the altitude of 100 feet or above. Those aircraft are rather new to our inventory. I don't know if anybody would want to hazard a guess as to how old. The A-10 was put into the inventory around 1976, for an example. So that would tell you why it's just a recent occurrence for you, because it really just got here. The F-4 and the F-15 operate at altitudes much above 500 feet, so that's why they haven't been a problem, although they have been here longer.

ROBERT CRUZ: And I guess maybe I could just come out with a last question, because I don't know how to talk to you any more. I think you say that you are a judge advocate. Who are you advocating for? Are you advocating for your uniform, your people, or are you here to try to help the people that have come and spent the whole day with you today?

COL CORDINGLY: I consider that question to be argumentative and I'm not going to answer it.

ROBERT CRUZ: That's all right. Thank you.

(Translation into the Papago language.)

DENNIS ORTEGA: My name is Dennis Ortega, and I'd like to know what kind of a--okay, an A-10, flying at 100 feet, what kind of damage would a 30-30 bullet make or a 30-06 do to it? The reason I am asking this is because while I was out on the reservation between Big Fields and Santa Cruz--there, a road that runs through there--okay, about a couple of months back one of those planes came and was using us for a target. He came over us twice. First he came from behind us; then it came from the front of us. Again on its third trip, coming toward us. We stopped the car. He got out. We had our 30-30 rifle with us. We pointed it at that airplane and that airplane made a--changed its course, and did not try to use us as a target again, nor were we bothered that afternoon.

LT COL SMITH: Dennis, I believe I should take the advice of the 1 officer here that it would probably be inadvisable to answer the question what any specific weapon would do to one of these airplanes. I might well hide behind the shield of secret information, which might be more less true. I think it would be safe to say it's not a good idea to shoot at any airplane. It's not good for the care and feeding of any airplane to have a 30-06 shot into it.

DENNIS ORTEGA: Okay, the reason I'm asking is, this is because like from people that I've talked to, my age group and maybe younger, who have been tired, getting tired of the Air Force and the Tribe of nothing being done for the Papagos, right. There has been no formal anything about shooting at airplanes or anything. That has just been an idea. But being that low, those planes are susceptible to being shot by 30-06 and 30-30s and 22s, and that may be eventually what will happen if this problem isn't taken care of.

LT COL SMITH: Well, I think we are getting into an extraordinarily speculative area right now. Apparently no one is saying that someone has yet shot with a 30-30 or a 30-06 and I suggest we leave it there. If it ever happens, then the situation will take care of itself at the time it happens, one way or the other.

CHAIRMAN WILLIAMS: (Speaking in the Papago language.)

COL CORDINGLY: Before closing, I would like to take this opportunity to thank you for your valuable comments and again assure you that they will be given full consideration in the final decision-making process that's now underway. Thank you again and good night. This session is adjourned.

The hearing concluded at 2100 hours, 27 March 1979.

SOUTHERN ARIZONA GROUP
1115 N. 1st Street
Phoenix, Arizona 85004

12619

March 23, 1979

(602) 251 4959

Memorandum

To: Public Hearing Officer
Office of the Assistant Secretary
United States Air Force (SAF/MIO)
Washington, D.C. 20330

From: General Superintendent, Southern Arizona Group

Subject: Official Comments for the Public Record on Draft Environmental
Impact Statement by the U.S. Air Force for Flight Operations
in the Sells Airspace Overlying the Papago Indian Reservation,
Pima, Pinal and Yuma Counties, Arizona (ER-79/154) and
ORGAN PIPE CACTUS NATIONAL MONUMENT

The Draft Environmental Impact Statement as prepared by the U.S. Air Force
is INADEQUATE, in our opinion, for a number of reasons. Some of the more
important reasons as we perceive them are:

- 139 [1. The Draft Statement fails to properly address the serious impacts
imposed upon the Monument. Organ Pipe Cactus National Monument has
been in existence as a unit of the National Park System since 1937.
As a large natural area of the system it was expressly created to
be enjoyed by all the citizens of the United States in as near a
natural environment as possible, free from all excessive man made
intrusions. Excessive, extremely low altitude jet aircraft maneu-
vering and the imposition of sonic booms seriously negate appropriate
public use of the Park to the point of being unacceptable by the
visiting public and the National Park Service.
- 140 [2. The Draft Statement fails to recognize the fact that Organ Pipe
Cactus National Monument has an added protected status as a unit
of the National Wilderness Preservation System. The National
Wilderness Preservation System, as mandated by Congress in the
Wilderness Act of 1964, calls for agencies administering areas
included within the system to be responsible for preserving the
wilderness character of the areas designated. The National Park
Service feels that to concur in the Air Force proposals for flight,
military training routes (Item 2.1.4) and the low altitude tactical
navigation maneuvering (Item 2.1.5) would be totally contrary to
that congressional mandate.

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3. The Draft Statement fails to recognize the fact that the Monument is one of only 28 natural sites within the entire United States officially designated as a unit of UNESCO's (United Nations Educational, Scientific and Cultural Organization) Worldwide "Man and the Biosphere" Reserve System. This system of unique natural conservation/preservation areas has the sanction and official support of many federal agencies and departments at the national decision-making level in Washington, D.C.. The type of excessive intrusion on the Monument stated by this Air Force flight operations proposal is incompatible with the UNESCO designation.

142

4. The Draft Statement fails to mention or even respond to the fact that the National Park Service has officially objected from the outset to the attempt to include the Monument in this proposal. The official objection of the National Park Service was expressly stated in two written letters dated March 9, 1977 and September 30, 1977 (copies enclosed) and the same position was repeatedly stated for the record by NPS representatives attending various meetings on this proposal at Sells, Arizona. The Draft Statement totally omits inclusion of the two official letters of protest in the appropriate sections of the Draft Statement and makes no reference to the supporting position maintained by NPS representatives throughout the various meetings held at Sells, Arizona. The Air Force has a significant state of unresolved controversy existing with the National Park Service and a large percentage of objecting public visitors to the Monument (a total of 150,271 visitors in CY 1978) which it neglects to even mention in its Draft Statement, particularly in Section 10.0 on page 59)

143

5. The Draft Statement fails to recognize or respond to the fact that Organ Pipe Cactus National Monument contains within its boundaries several officially confirmed existing units and several nominated units pending review/acceptance on the "National Register of Historic Places" as authorized by the National Historic Preservation Act of 1966 and Executive Order 11533.

Official listing on the "National Register" provides protection through mandatory review and comment by the "National Advisory Council on Historic Preservation" of the effect of all federally financially assisted or licensed undertakings on historic properties as stated in Section 106 of the National Historic Preservation Act of 1966. The "National Advisory Council", in addition to advising Congress and the President, also advises and assists Federal departments and agencies in discharging their historic preservation responsibilities. To ensure proper consideration of the value of National Register properties in the Federal planning and programming process, Congress gave the advisory council a review and comment responsibility as specified in Section 106: "The head of any Federal agency having direct or indirect jurisdiction over a proposed Federal or Federally assisted undertaking in any State and the head of any Federal department or independent agency having authority to license any undertaking, shall, prior to the approval of the expenditure of any Federal funds on the undertaking, or prior to the issuance of any license, as the case may be, take into account the effect of the undertaking on any district, site, building, structure,

or object that is included in the "National Register". The head of any such Federal agency shall afford the National Advisory Council on Historic Preservation ...a reasonable opportunity to comment with regard to such undertaking. (For required procedure see 36 CFR 800.) We do not believe the Air Force has obtained "Section 106" clearance on the possible effects of the proposed Sells Military Operational Area on "National Register" sites within Organ Pipe Cactus National Monument.

144

6. The Draft Statement and preparatory public hearing process failed to give adequate public opportunity for comment. Under the National Environmental Policy Act (NEPA) of 1969, proposed projects or activities of a highly controversial nature, like the Sells Military Operational Area over Organ Pipe Cactus National Monument, are expected to be fully presented to a broad spectrum of the public by means of meetings or hearings where the public at large can be fully informed of the extent and consequences of the proposal and have ample opportunity for expression of their personal feelings about it. It is our contention that the extent of the proposed intrusion on Organ Pipe Cactus National Monument, if fully known to the public at large, by means of well-publicized public forums held in Tucson, Phoenix, Flagstaff, and other appropriate locations, would surface considerable public opposition to the inclusion of Organ Pipe Cactus National Monument in the proposed Sells Military Operational Area.

The several items mentioned above highlight our opposition to this Air Force proposal as it is presently constituted. We must strongly protest the inclusion of Organ Pipe Cactus National Monument within the Sells Military Operational Area. Military training flights, as they are currently occurring, and as proposed for official IMA sanction under the Air Force proposal for the Sells Military Operational Area, excessively compromise the intent of the proclamation establishing the Monument, its operation under the NPS Establishment Act of 1916, the National Wilderness Preservation Act of 1964, the Park's UNESCO "Man and the Biosphere" status, the National Historic Preservation Act of 1966 and Executive Order 11593, and some environmental protection aspects of the National Environmental Policy Act of 1969, as it applies to Organ Pipe Cactus National Monument.

John H. Clay

John H. Clay

Enclosures



United States Department of the Interior

NATIONAL PARK SERVICE

ORGAN PIPE CACTUS NATIONAL MONUMENT

Rural Route 1 Box 100, Ajo, Arizona 85321

IN REPLY REFER TO:

W-4618
X-L7619

1 March 1979

MEMORANDUM

To: General Superintendent, SOAR

From: Superintendent, ORPI

Subject: Sells Low MOA Environment? Impact Statement

After reviewing the Draft Environmental Impact Statement regarding "Flight Operations in the Sells Airspace Overlying the Papago Indian Reservation, Southern Arizona". The following notations need to be brought out in our response to the Statement, as viewed by the National Park Service and Organ Pipe Cactus National Monument.

- 145 1. The Draft Statement fails to properly address the impacts to be imposed upon the Monument.
- 146 2. The Statement failed to include the two written letters of protest submitted by our regional office dated March 9, 1977 and September 30, 1977 regarding the proposal.
- 147 3. In reviewing the draft statement one might get the impression that the Monument is not included in the proposed flight operations. This was the verbal impression received by our regional office when they discussed the matter with Lt. Colonel Kissling, see attached letter dated September 30, 1977. While the statement reads that: transition training 2.1.1, formation training 2.1.2, and air combat maneuvering training 2.1.3 (see pages: 5, 6, 7, 8, 9) do not propose to use the airspace below 10,000 feet over the monument, it must be recognized that the monument will be affected by sonic booms initiated at levels above 10,000 feet and those initiated beyond the boundaries of the monument. The Air Force does appear to be attempting to reduce this impact. On the other hand the more severe disturbances and distractions occur from the military training routes 2.1.4 and the low altitude tactical navigation maneuvers 2.1.5 (see pages 10, 11, 12) which propose using the entire monument for low level flights 100-1500 feet above ground

level. The exception being that the document states they will not fly over Park Headquarters at these low levels.

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4. On page 39 the document states that there have been no complaints received from Organ Pipe Cactus National Monument within the past year concerning sonic booms. The year in question is unknown, however, at the August 30, 1977 meeting at Sells, Arizona on this subject I personally took our documented log of air disturbances which had been recorded over several years. I made this available to the Air Force and also voiced our concern at that time. Since then sonic booms have continued to be recorded and even more serious has been the increased and almost daily disturbance caused by low level flights well below 1000 feet over most parts of the Monument including Park Headquarters, the campground and other inhabited areas. These have gone beyond single passes over the area and in many instances they have been prolonged and repeated maneuvers at low levels over these restricted areas. In addition, the same type of flights are taking place in all the valleys, along major visitor roads and elsewhere within the monument. The monument took steps as early as August 1978 to contact all known air bases where these flights might be originating from. We requested time to meet with those in charge in order to express our concern and try to resolve the matter. The first meetings were held on February 27, 1979 at Luke and Williams Air Force bases. Both of these state they have no approved flights over the monument at these low levels nor do they use the A-10 which has been most often identified.

In summation, this office must strongly protest the inclusion of the Monument within the designated airspace where flights would compromise the intent of the proclamation which established the Monument as well as other mandates which guide us in the management of this area. The most recent being the designation of 312,000 acres of the Monument as wilderness which was passed by Congress November 10, 1978. The two letters from our regional office still stand, I do not feel these low level flights anywhere within the Monument can be acceptable where the wildlife and the visitor will sacrifice.


Ray G. Martinez, Jr.
Superintendent



BY REPLY LETTER TO:

W4618
(WR)OV

United States Department of the Interior

NATIONAL PARK SERVICE
WESTERN REGION
430 GOLDEN GATE AVENUE, BOX 16063
SAN FRANCISCO, CALIFORNIA 94101

September 30, 1977

Mr. Don M. Davis
Chief, Airspace & Procedures Branch
Air Traffic Division
Federal Aviation Administration
Western Region
P. O. Box 92007
World Way Postal Center
Los Angeles, California 90009

RECEIVED
Organ Pipe Cactus, N. M.
OCT 9 1977

CH. MAINTENANCE	
CH. INVESTIGATION	
CH. RECORDS & COMM.	
CH. PLANNING	
CH. TRAINING	
CH. PUBLIC AFFAIRS	
CH. RESEARCH	
CH. LEGAL COUNSEL	
CH. FINANCE	
CH. PERSONNEL	
CH. SAFETY	
CH. SECURITY	
CH. UTILITIES	
CH. WILDLIFE	
CH. ZONING	
CH. OTHER	

Dear Mr. Davis:

149

On March 9, 1977, we wrote you protesting the inclusion of Organ Pipe Cactus National Monument, Arizona (516 square miles) within the proposed Sells Military Operation Area, Airspace Case # 77-WZ-9-NR.

Since that time, representatives of the National Park Service's Southern Arizona Group Office at Phoenix and Organ Pipe Cactus National Monument have attended several public meetings concerning the proposed military operations area. We have also discussed the matter by telephone with Lt. Colonel Kissling, who informed us that to his knowledge, no low level routes are currently proposed over Organ Pipe Cactus National Monument in relation to the above case. Further, it is our understanding that the United States Air Force has agreed to a 3,000 foot floor for the Sells MOA, with any military training routes or zones below the 3,000 foot floor being the product of advance mutual agreement between all agencies and bureaus involved. In the event that any further proposals for such flights are contemplated, it should be noted that as a matter of National Park Service policy emanating from Congressional mandate, all of our objections as stated in our March 9, 1977, letter to you still stand.



IN REPLY REFER TO:

W4618
(WR)OV

United States Department of the Interior

NATIONAL PARK SERVICE

WESTERN REGION
430 GOLDEN GATE AVENUE, BOX 36061
SAN FRANCISCO, CALIFORNIA 94102

March 9, 1977

Mr. Don M. Davis
Chief, Airspace and Procedures Branch
Air Traffic Division
Federal Aviation Administration
Western Region
P. O. Box 92007, Worldway Postal Center
Los Angeles, California 90009

Dear Mr. Davis:

We have reviewed the proposed establishment of the Sells Low Military Operations Area, Airspace Case No. 77-WE-9-NR and must protest the proposed action.

150

Areas of the National Park System have been established by the Congress for the preservation of their inherent natural and historical values and for the enjoyment of all the people. Aircraft noise is a major factor which diminishes the enjoyment of these areas particularly when there is a concentration of aircraft as occurs during training exercises. We have received numerous complaints from visitors, many of whom have recommended our seeking air space reservations above areas of the National Park System. While we recognize the need to conduct air training exercises, we request that due consideration be given to citizen rights to enjoy their National Park System free from the intrusion of excessive noise.

The National Parks, like the National Forest wilderness areas, have been set aside by acts of the Congress to be enjoyed in their natural state. Motorized vehicles are generally banned from the areas, except as permitted by the administering agency, since their presence invariably disturbs the natural environment. Low flying aircraft cause a major harassment to the wildlife.

cc: spt ORPI

We are firm in our belief that the effect of low-level flight on wildlife and visitors to Organ Pipe Cactus National Monument must be taken into consideration. As you are aware, we receive many complaints from park visitors who resent having their visit to a National Park Service area marred by the sound of low-flying aircraft.

We appreciate the efforts of the Federal Aviation Administration and U. S. Air Force to avoid specific ground sites of a sensitive nature and pledge to continue working with you in this regard. Please let us know of any other proposed military operations areas, or changes in those now existing.

Sincerely yours,

for ASGCM JOHN H. DAVIS

Howard H. Chapman
Regional Director
Western Region

cc: Supt ORPI ✓

Several endangered or threatened species exist in Organ Pipe Cactus National Monument, such as the Sonoran pronghorn, Mexican wolf, and Peregrine falcon. The Endangered Species Act protects species in danger of extinction against any form of harassment. Low flying aircraft in the proximity of endangered species, in our opinion, is a form of harassment which would require approval of a Section 10 permit application as provided by the Endangered Species Act of 1973. We have greatly reduced the amount of helicopter and fixed wing flying in areas administered by the National Park Service except in cases of emergency. We believe public opinion would not permit doing otherwise.

For the above reasons, the National Park Service protests the proposed establishment of the Sells Low Military Operations Area, Arizona.

Sincerely yours,

(S)G5, 11-11-73, L. Chapman

Howard H. Chapman
Regional Director
Western Region

cc: Supt ORPI w/cy incoming

M E M O R A N D U M

TO: Office of the Assistant Secretary of the Air Force (SAF/MIQ),
Washington, D.C., 20330

FROM: Papago Legal Services, Inc.

SUBJECT: Comment on United States Air Force Draft Environmental Impact Statement,
Flight Operations in the Sells Airspace Overlying the Papago Indian
Reservation, Southern Arizona

DATE: Mark 27, 1979

INTRODUCTION

The National Environmental Policy Act ("NEPA," Pub. L. 91-190, 83 Stat. 852,
42 U.S.C. 4321, et. seq.) requires that all agencies of the federal government
"include in every recommendation or report on ... major federal actions signifi-
cantly affecting the quality of the human environment a detailed statement by the
responsible official on ... the environmental impact of the proposed action."
42 U.S.C.A. §4332(2)(C)(i) (1970). The Air Force Draft Environmental Impact
Statement (DEIS) noted above was apparently written in an attempt to comply with
the legal requirements of NEPA. The purpose of this memorandum, written on behalf
of clients of Papago Legal Services with the concurrence of the Papago Tribe, is
to comment on the Draft Environmental Impact Statement in conjunction with the
public hearing held this date at the Santa Rosa Boarding School on the Papago
Indian Reservation.

The very existence of NEPA indicates that protection of the environment is
to be given paramount importance and thus is not to be placed on an equal footing
with the usual economic and technical factors. The language in the statute itself
indicates that protection is to be given to the interests of the Papago people
involved in this case.

In its declaration of national environmental policy, Congress, after speaking
of the "social, economic, and other requirements of present and future generations
of Americans," 42 U.S.C.A. §4331 (a), went on to state:

...

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"(b) In order to carry out the policy set forth in this chapter, it is the continuing responsibility of the Federal Government to use all practicable means, consistent with other essential considerations of national policy, to improve and coordinate Federal plans, functions, programs, and resources to the end that the Nation may --

(1) fulfill the responsibilities of each generation as trustee of the environment for succeeding generations;

(2) assure for all Americans safe, healthful, productive, and esthetically and culturally pleasing surroundings;

(3) attain the widest range of beneficial uses of the environment without degradation, risk to health or safety, or other undesirable and unintended consequences;

(4) preserve important historic, cultural, and natural aspects of our national heritage, and maintain, wherever possible, an environment which supports diversity and variety of individual choice;

(5) achieve a balance between population and resource use which will permit high standards of living and a wide sharing of life's amenities; and

(6) enhance the quality of renewable resources and approach the maximum attainable recycling of depletable resources." (Emphasis added.)

And in its mandate to federal agencies, 42 U.S.C.A. §4332, Congress required that all agencies of the federal government "identify and develop methods and procedures ... which will insure that presently unquantified environmental amenities and values may be given appropriate consideration in decisionmaking along with economic and technical considerations." 42 U.S.C.A. §4332(2)(B). (Emphasis added.)

In accordance with these policies of the federal government, it is assumed that the purpose of today's public hearing is to assist the Air Force in fully considering the consequences of its military operations over the Papago Indian Reservation. The language and spirit of NEPA would indicate that such an evaluation is intended to lead to decisions on the part of the Air Force that will reduce the harm suffered by those people living on the Papago Indian Reservation. It would be illogical to require the use of all of the procedural protections of NEPA (such as this public hearing) if in the end they do not accomplish the purpose of protecting the environment. Since this proceeding is not an adversarial legal action, the following comments will only touch briefly upon possible legal theories. Rather, to help the Air Force fully consider the impacts of its actions, comment will focus upon particular areas of concern in the Draft

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Environmental Impact Statement.

ANALYSIS OF DEIS

The format for this section will be to pinpoint and quote the particular statement in the Draft Environmental Impact Statement and then provide an analysis.

"SUMMARY SHEET

* * *

3. Description of Action: This statement discusses current and future Air Force and Air National Guard aircrew training in the airspace over the Papago Indian Reservation in Southern Arizona." (Page i.)

Comment: The statute, 42 U.S.C.A. §4332(2)(C)(i), requires a "detailed statement." Yet, from the above statement there is no way to know exactly what "current and future ... training" really means. Exactly what future changes are planned? When are these future changes planned? What types of aircraft will be involved and in what numbers? What maneuvers are planned? How long is any contemplated change expected to last?

"4. Summary of Environmental Impact: * * * The noise from low flying aircraft and sonic booms are (sic) likely to generate adverse public reaction and/or result in claims for broken glass and cracked plaster." (Page i.)

Comment: The focus of the above-quoted statement is on the inconvenience to the Air Force from people who are aggrieved by Air Force actions. This concern is misdirected -- the analysis in the Draft Environmental Impact Statement is supposed to be about impacts on the environment, not impacts on the Air Force.

This is not a problem initiated by the Papago people, who are after all living on their own reservation, but a problem initiated by the Air Force, which is using the reservation as a training area.

"6. Actions Taken to Reduce or Mitigate Impact:

* * *

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(1) The Papago and Luke AFB have a working committee to identify problems and make recommendations for equitable solutions." (Page ii.)

Comment: This statement is not accurate at the present time, if it refers to meetings such as those arranged in the past by this office. The last meeting attended by a representative from Papago Legal Services, Inc. was held on March 28, 1978. Because of time constraints dictated by the necessity of serving the other legal needs of people living on the Papago Indian Reservation, this office has not been able actively to participate in further review of the Air Force problem. While no doubt well-intentioned, the Air Force's desire for continuous participation by this office in solving Air Force problems while providing no funding for this purpose (see further comment below) has had the effect of partially depriving the Papago people of the sole means of legal services on the reservation.

"(2) An active program has been initiated by the Air Force to explain impacts caused by jet aircraft noise and explain how to recover the cost of damages by Air Force operations." (Page ii.)

Comment: Again, the statute requires a "detailed statement." It is impossible to intelligently comment upon the Air Force's explanatory program without knowing more details about the program. How does this Air Force program operate? Does it provide written materials? Does it provide means for overcoming the language barrier for those residents of the reservation who only speak the Papago language? Does it provide means for overcoming the literacy barrier for those who cannot read or write? Does it provide means for overcoming the transportation barrier for those who do not have access to a car or truck? How often does this program operate? Do representatives of the Air Force travel to outlying areas of the reservation to assist in the processing of compensation claims, or is this burden thrust upon the residents themselves? Are there provisions for the Air Force to employ Papago people in order to assist those who may be hesitant in

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dealing with an alien culture? Where does this program operate?

As the sole legal services resource on the Papago Indian Reservation, our office should be aware of such a program. Yet, no contacts by our office have revealed the existence of this explanatory program. Surely this program can be suspected of being something less than "active".

"2.0 AIR FORCE FLYING ACTIVITIES IN SELLS AIRSPACE:

* * *

2.1 Current Operations:

* * *

The availability of airspace suitable for tactical flying training continues to be limited by population density, environmental factors, and civil air traffic. (Page 4.)

Comment: This is a key problem, a pressure problem. As urban areas throughout the United States expand, they encroach on areas used by the military. It is the position of this office that it is fundamentally unfair to move military operations onto the reservation as urban expansion continues. This in effect punishes people for choosing to live in a rural area. This is contrary to the words of the statute: "...it is the continuing responsibility of the Federal Government to ... maintain, wherever possible, an environment which supports diversity and variety of individual choice." 42 U.S.C.A. §4331(b)(4). (Emphasis added.) More importantly, using the Papago Indian Reservation as a dumping ground for urban expansion impermissibly burdens the ancestral homeland of the Papago people which was set aside for them by Executive Order. The Papago Indian Reservation is a unique part of the nation's cultural heritage (see 42 U.S.C.A. §4331(b)(4), quoted above), and cannot be evaluated in terms of the technical aspects of its geographical vastness and lack of population density alone.

2.1, Current Operations, continued -

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1 "With the large number of modern USAF aircraft and aircrews required for
2 national defense, the limited airspace acceptable for tactical fighter training
3 in the United States is in constant demand and heavily scheduled." (Emphasis
4 added.) (Page 5.)

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5 Comment: If this analysis assumes that the Sells Airspace is an "acceptable
6 training area, it begs the question and shows a predisposed answer towards the
7 very question that is to be evaluated. The purpose of an environmental impact
8 statement is to evaluate the environmental impacts in order to decide whether or
9 not the proposed action is "acceptable." This office is opposed to any position
10 that the Papago reservation is an "acceptable" training area if this position
11 ignores the unique status of the area. One reason that the reservation might be
12 viewed by the Air Force as an acceptable training area is the very fact that the
13 training facility is above the Papago Indian Reservation, that is to say, that the
14 interests of the Papagos are intrinsically less valuable from the viewpoint of
15 the dominant culture. This position should be avoided.

16 "2.3.2 Military Training Conducted Below 3000 Feet: * * * Military training
17 routes are developed by the appropriate Air Force unit, coordinated with FAA and
18 published in DOD FLIP to accommodate low level training flight operations for all
19 military aircraft overflying the reservation below 3000 feet AGL at speeds above
20 250 knots. This procedure reduces the flexibility and/or responsiveness in
21 establishing and/or adjusting military training routes to avoid newly identified
22 noise/time sensitive areas. Since the administrative procedure to accomplish the
23 above requires approximately 120 days, care and restraint must be exercised by all
24 concerned to avoid degradation of training from possible long term discontinuance
25 of training while a route/route segment change is made." (Page 18; emphasis added)

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26 Comment: The theme here appears to be "don't rock the boat." As noted
27 previously (this memorandum, page three, line 19), a focus on impacts for the
28 Air Force, as opposed to impacts for the environment and the Papagos, is inappro-

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1 private for an environmental impact statement.

2 2.3.2, Military Training Conducted Below 3000 Feet, continued -

3 "Discussions between the Air Force and the Papago Tribal Representatives
4 have identified noise sensitive areas that are to be avoided." (Page 20.)

5 Comment: It should be noted that the position of Papago Legal Services
6 (see letter of September 8, 1977, DEIS Appendix C-2-31 et. seq.) has been that
7 acceptance of the proposal which allowed training around these "protective cones"
8 above sensitive areas is "...expressly conditioned upon continued good faith
9 efforts on the part of the Air Force and the FAA to (a) develop mutually acceptable
10 low level corridors below the 3,000 foot floor of the Sells Low MDA, (b) develop
11 alternatives which will significantly reduce the volume of low level training
12 flights above the reservation (e.g., expand the Gila Range and reroute some flights
13 around the northern horn of the reservation; utilize other airspace adjacent to the
14 Gila Range for alternative entry corridors; all other feasible alternatives), and
15 (c) substantially reduce the number and impact of sonic booms over the reserva-
16 tion." (Letter of September 8, 1977; DEIS Appendix C-2-33-34; emphasis added.)

17 It should also be noted that acquiescence to the immediate establishment of the
18 low-level routes due FAA deadlines was conditioned upon eventual "extensive input
19 from the Papago people." A two-stage process for route development was proposed:
20 1) interim routes developed with information immediately at hand for submission
21 before the FAA's January 1, 1978 deadline; 2) extensive field work by Papago Legal
22 Services under the supervision of the Papago Tribe to define and locate sensitive
23 areas not taken into account when the interim routes were established, with
24 eventual submission of the revised routes to the FAA for approval and charting.
25 At that time, our office requested that the Air Force and/or the FAA provide
26 sufficient funds to accomplish this work. The Air Force never responded to this
27 proposal and therefore no careful consideration of sensitive areas to be avoided
28 by military aircraft has taken place. See DEIS Appendix C-2-31. et. seq. The

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1 Draft Environmental Impact Statement should more clearly specify what procedures
2 are used by the Air Force to insure compliance in this area. In particular, the
3 statement should discuss options for funding field studies to identify sensitive
4 areas and insure that the interim routes are readjusted to take them into account.
5 The Air Force must carry the burden of mitigation activities, not the Papagos.

6 "2.3.3 Operational Concept:

7 * * *

8 Low Altitude Training Navigation (LATN): The areas shown in Figure 2.3.3
9 are those currently being avoided by aircraft flying LATN. Additional areas are
10 under study between the Air Force and the Papago." (Page 20.)

11 Comment: First, reports from reservation residents received by our office
12 indicate that the areas to be avoided are frequently not respected by overflying
13 aircraft. Undoubtedly there will be direct testimony to this effect at today's
14 hearing. Second, as noted above, to the knowledge of this office additional
15 areas to be avoided by low flying aircraft are not under study with the Papago
16 people. See comment, this memorandum, page four, line 3.

17 "4.0 PROBABLE IMPACT OF THE CURRENT AND PROPOSED ACTIONS ON THE ENVIRONMENT:

18 * * *

19 4.2.1 Sonic Booms: * * * During Calendar (sic) Year 1977, records indicate
20 10,394 supersonic sorties were flown in the Sells Airspace. The maximum number of
21 sonic booms that could have occurred (sic), based on four per sortie, was 41,576.
22 The number of sonic booms that probably occurred, based on the average of 2.8
23 per sorties, was 24,104. The time duration of each sonic boom is impossible to
24 determine due to the various maneuvers being performed and how many are actually
25 heard is even more difficult to ascertain." (Page 32.)

26 Comment: This shows an over-reliance on the need for hard data, a problem
27 that pervades the entire DEIS. The fact that it is not possible to determine the
28 exact number of sonic booms actually heard is not the end of the question. That

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1 the exact number cannot be quantified does not mean that the effect is therefore
2 not to be further considered. When there is no specific and ascertainable cost
3 associated with a harm, the harm is nonetheless to be considered under NEPA. In
4 fact, common sense dictates that out of such a large number of sonic booms many
5 must be heard by those on the ground and the effect must surely be disconcerting.

6 4.2.1, Sonic Booms, continued -

7 "Exposure of Humans to Sonic Booms: * * *" (Pages 36 and 39.)

8 Comment: This section will not be quoted here, as it is short enough to be
9 read in its entirety in the Draft Environmental Impact Statement itself. In fact,
10 out of a 62-page report, only two pages are devoted to this subject of critical
11 concern.

12 The entire discussion of the effects of exposure of humans to sonic booms is,
13 again, overly technical, confined mostly to effects that can be directly measured,
14 e.g., "direct physiological effects," "temporary hearing loss," and "direct
15 personal injury." This sparse discussion of personal injury neglects any mention
16 of indirect personal injury. Our office is aware of specific instances of such
17 indirect personal injury, but such instances will in any case probably be mentioned
18 at this hearing. Such indirect personal injury includes, but is not limited to,
19 a head injury from falling ceiling tile and brain damage suffered when a horse
20 was spooked and a wagon rolled over the head of the fallen driver.

21 That "there is no evidence of direct personal injury" does not mean that
22 such injury does not exist, but only that using current methods it cannot be
23 specifically quantified. One might wonder, for example, how many such shocks
24 might be suffered by an elderly person in a remote area which only result in
25 directly ascertainable harm at a later time. In addition, it is unclear whether
26 the term "personal injury" includes effects that are harder to observe, such as
27 anxiety and stress. Or, is the term confined only to those effects that can be
28 directly and immediately observed, such as a broken leg? To say that tests have

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1 shown no evidence of direct personal injury from sonic booms is far from a
2 detailed statement of what harm may actually be suffered by those on the ground.
3 It is stated on DEIS page 36 that nineteen sonic booms per day are estimated
4 to impinge on communities located in areas where sonic booms are likely to occur.
5 Yet, this rather amazing number of intrusions into the lifestyle of the Papagos is
6 followed by a cursory analysis of "psychological impressions" based on interviews
7 of an unspecified nature, number, or length. The only finding reached (page 39)
8 is the rather unsurprising conclusion that "most individuals described the sonic
9 booms and direct overhead Low Level flights as undesirable and disturbing" and
10 "several individuals reported fear among very young children and older adults
11 from these exposures." Again, there is the implication that since "personal
12 irritation" is "difficult to assess with accuracy" it need not be given serious
13 consideration. But see 42 U.S.C.A. §4332, quoted above. That there are
14 unquantifiable aspects to the Air Force problem should not be an excuse not to
15 attempt a thorough assessment through such means as on-site visits or expert
16 analyses of sociologists, psychologists, psychiatrists, and/or anthropologists.
17 The limited evaluation in this DEIS is not justified by any limitations of available
18 information sources or analytical tools.
19 The only specific factual finding in this section (page 39) is that sonic
20 booms recorded by Air Force personnel were loud enough to cause a "startle effect."
21 This appears to be a statement that the "startle effect" is the harm suffered. But
22 again, the discussion ends too early. It is not enough to look at each individual
23 incident; rather, attention should be concentrated on the history of disturbances
24 in an assessment of the overall situation. For example, if one would be forced to
25 spend an entire day with a gun next to one's ear which could go off at any moment,
26 any number of times, and at unexpected intervals, the harm would be not only the
27 shock of the actual sound, but also the fear and anxiety caused by the expectation
28 of that shock. It is this sort of fear and anxiety, an ever-present harm, that

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the DEIS fails to make a "detailed statement" about.

In addition, the fact that the homeland of the Papago people is used as a training area for the United States military may well be perceived as a cultural insult by those who make the Papago Indian Reservation their home, as today's testimony will surely show. While certainly not a specifically measurable harm, this might be considered the most damaging environmental impact of all. The DEIS alludes to the possibility of this by stating at page 39 that "Such areas offer a quiet solitude that have (sic) characterized the Papago lifestyle for thousands of years." Indeed, a student on the Papago people indicates that the types of disturbances created by Air Force training missions is even more offensive to the Papago culture: "As they climb into the hills, they do not speak; for noise always seems, to the Papago, to be disrespectful to the supernatural powers." Underhill, Ruth Murray, Singing for Power: The Song Magic of the Papago Indians of Southern Arizona, University of California Press, 1938, at 55. Yet the DEIS evaluation of this harm shows more concern for Air Force convenience than for Papago culture: "Continued supersonic operations in the Sells Airspace are expected to result in periodic noise complaints and claims for damages at an increasing frequency." 39. The DEIS should make a detailed evaluation of the harm to the Papago culture and lifestyle which results from military operations in the Sells Airspace. This should involve expert studies and field work by experts in the social sciences, with specific findings of fact and recommendations for amelioration of the harm.

4.2.1, Sonic Booms, continued -

"Effects on Structures: * * * Sonic booms generated by aircraft flying supersonic above 30,000 feet can produce a nominal overpressure of 0.5 pounds per square foot (psf). Overpressures in this range will not normally damage structures. It is probable that most sonic booms in the Sells Airspace are below this level. However, older buildings and those in need of repair could suffer

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1 further deterioration of already damaged materials.

2 * * *

3 For sonic booms generated during normal cruising flight, considering all
4 flight paths and the typical 1 psf overpressure, breakage is anticipated at 68 per
5 million exposed (window) pages due almost entirely to already cracked windows."
6 (Pages 40 and 41.)

7 Comment: It should be made clear that neither the comment about "already
8 damaged materials" or the comment about "already cracked panes" is meant to mean
9 that causing further damage is considered acceptable. The Papago Indian Reserva-
10 tion is a poor place and many people live in what might normally be considered
11 sub-standard housing. This does not mean that such housing is valued any the
12 less, or that it is therefore permissible to accelerate its demise. After all,
13 a cracked window pane is better than none at all.

14 "4.2.2 Low Altitude Training:

15 * * *

16 Effects on Humans: * * * Exposure of people to this level (noise from
17 overflights at an altitude of 500 feet) is classified as annoying...." (Page 42.)
18 See also DEIS page 54, where it is stated that "Sonic booms and low level flights
19 are psychologically annoying."

20 Comment: The same comment can be made here as above, this memorandum
21 starting at page ten, line 3. Also, it should be noted that out of a 62-page
22 report, only one-half of a page is devoted to the effect of low altitude training
23 on humans.

24 That low-flying planes are classified by the DEIS as "annoying" does not
25 take into account the very real subjectively perceived fear at the sight of a
26 nearby or overhead military aircraft. That such fear is reasonable (and reasonable
27 or not, just as real) is illustrated by the jet crash in the nearby city of

28 Tucson just five months ago, October 26, 1978, which killed two people, as well as

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1 reports of practice bombs falling where people could be located, accidental
2 strafings of civilians on the ground, and the seven plane crashes involving eight
3 aircrafts between April 15, 1968 and June 15, 1977 noted in the DEIS at pages 46-
4 47. See attached newspaper clippings.

5 At page 46 of the DEIS it is stated that the reported military airplance
6 crashes on the reservation "would not appear to constitute a significant accident
7 hazard, especially when population density is considered." While this may be
8 technically true, it ignores entirely a significant environmental impact -- the
9 fear of an individual person threatened by a particular jet a a particular time,
10 as well as the on-going harm of the anxiety generated by the knowledge that such
11 a threat can occur at random. This anxiety may be worsened by the feeling that
12 Air Force pilots are not following applicable regulations and agreements.

13 "4.6 Historical/Archeological:

14 * * *

15 4.6.2 Previous and existing supersonic training and low altitude flights
16 over the Papago Reservation have not produced any known damage to archeological
17 sites." (Page 49.)

18 Comment: As stated in the analysis above, this sort of evaluation ignores
19 what may be termed the cultural insult aspect of environmental damage. A
20 specific physical deterioration is not necessary for a cultural harm to take place,
21 any more than it would be necessary to show a specific physical harm from military
22 jets buzzing the birthplace of Christ or the temple in Jerusalem. Other witnesses
23 can no doubt provide better testimony in regard to cultural harms suffered from
24 Air Force operations.

25 "5.0 ALTERNATIVES

26 * * *

27 5.2.2 Fly Routes Established by Other Bases

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1 Development of additional routes in Southern Arizona is not possible due to
2 the already existing routes. ...the existing routes, heavily populated areas,
3 and existing airports cover almost the entire land area of Southern Arizona. * * *
4 Another reason more routes are not developed is that the population density is
5 greater in other areas in the Phoenix, Tucson, and Southern Arizona areas. The
6 area underlying the Sells Airspace is on (one?) of the less densely populated
7 areas in Southern Arizona." (Page 51.)

8 Comment: See comment re DEIS paragraph 2.1, page five, line 13, of this
9 memorandum. Again, this is illustrative of the pressure problem created by urban
10 areas expanding into military operations areas. To use the Papago Indian Reserva-
11 tion as a dumping ground for urban expansion in effect penalizes reservation
12 residents for choosing to live in a rural area and, more importantly, penalizes
13 the Papago people for living on their ancestral homeland reserved to them by the
14 United States government in trust.

15 "6.0 PROBABLE ADVERSE ENVIRONMENTAL EFFECTS WHICH CANNOT BE AVOIDED SHOULD
16 THE PROPOSAL BE IMPLEMENTED.

17 * * *

18 6.2 Noise. * * *

19 6.2.1 Physiological. * * *

20 6.2.2 Psychological. * * *

21 6.2.3 Sociological. * * *

22 * * *

23 6.2.5 Physical. * * * (Page 54.)

24 Comment: The DEIS discussion of noise effects which cannot be avoided
25 should the proposal be implemented will not be quoted here, since it is short
26 enough to be quickly read in its entirety in the DEIS itself -- only one page.
27 The one paragraph that discusses physiological effects is subject to the previous
28 criticism that it relies too heavily on the need for hard data and therefore

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1 ignores other possible adverse environmental impacts. The discussion of harms
2 speaks of those that "cannot be supported" or "predicted," those that are "isolated
3 and those that are "influenced by other variable factors." This superficial
4 glance shows that the Air Force has not taken the hard look necessary to truly
5 evaluate the possible unavoidable harms which may result from its military
6 operations, including cumulative harms.

7 The discussion of psychological harms is likewise sketchy. The DEIS reader
8 is only informed that: "Sonic booms and low level flights are psychologically
9 annoying. Although nervousness, and anxiety or fear may result, it is doubtful
10 if these would be directly responsible for any permanent disability." (Page 54,
11 emphasis added.) As stated previously in this memorandum, page ten, line 3, and
12 page 12, line 20, this lack of a "detailed statement" fails to meet the require-
13 ments of the law and is not justified by a limitation of resources.

14 Sociological effects are limited to a discussion of three activities (the
15 annual rodeo, Feast of St. Francis, and Tawiti (?) celebration) plus outdoor
16 activities such as camping and hunting. As other testimony at today's hearing
17 will surely show, the sociology of the Papago people is not confined to the above.
18 See comment in this memorandum at page ten, line 5, to page 11, line 22.

19 The overview of physical damage effects which cannot be avoided, is, again,
20 too brief. It is stated that tests show that Sells Airspace sonic booms "are
21 usually not of sufficient magnitude to cause structural damage." (Page 54;
22 emphasis added.) However, no effort is made to assess how much damage is actually
23 caused. That "claims are routinely paid if the total claim is less than \$100"
24 provides no information about how often this claims procedure really does provide
25 relief for the physical damage caused reservation residents.

26 "6.3 Accidents. * * * Past accidents which have occurred in the Sells
27 Airspace indicate the probability of a significant adverse impact is low; however,
28 this does not alleviate the fear and anxiety caused by low level flying." (Page 55.)

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1 Comment: While objectively the possibility of "significant adverse impact"
2 in the form of an aircraft accident may be low, the "fear and anxiety" caused by
3 overhead military operations is itself an impact that needs to be addressed in its
4 own right. As previously stated, an analysis needs to be made of the effect that
5 this "fear and anxiety" has on the lifestyle of the Papago people.

6 "6.4 Actions Taken or Proposed to Mitigate the Adverse Environmental Impacts."

7 Accomplished Actions:

8 * * *

9 6.4.2 * * * A study of supersonic flights for F-15 aircrew training
10 recommended that aircraft remain sub-sonic until within 10 NM of each other. If
11 this recommendation is accepted, it will reduce the area over which sonic booms
12 will occur by about 60%" (Page 55; emphasis added.)

13 Comment: Since it is unclear from the face of the document when this DEIS
14 was written, the question occurs, has this recommendation been accepted? If not,
15 when can a decision be expected? Who is responsible for making the decision?
16 What opportunities are available for public input on the decision? In addition,
17 it is unclear what effect such a decision will have, since it is only stated that
18 the area over which sonic booms are heard will decrease by 60%. What effect will
19 this have on the number and severity of sonic booms probably actually heard on the
20 ground?

21 "6.4.3 An improved pilot briefing program has been developed to insure that
22 all units using the Sells Airspace are reminded prior to each flight of restric-
23 tions and sensitive areas underlying the Sells Airspace." (Page 55.)

166
24 Comment: What are the procedures used in this program? A "detailed
25 statement" is necessary before the public can adequately comment on such a program.
26 This is a very critical concern, for as other witnesses will no doubt testify,
27 the feeling among many reservation residents is that "sensitive areas" are often
28 not respected by Air Force planes.

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1 "6.4.5 The Papago and Luke AFB have developed a working committee."

2 (Page 55.)

167 3 Comment: This is not entirely accurate. See comment at page four, line
4 of this memorandum. For some time, there has been no meeting "the last Tuesday
5 of every month" and no "continuous dialogue."

6 "6.4.6 An active positive public relations program has been initiated by
7 the Air Force to explain impacts caused by jet aircraft noise and accidents. * * *
8 Recommendations from the Papago Council will also be used in developing this
9 program." (Page 55-56.)

10 Comment: More particulars are required about this program in order for the
11 public to comment in an informed manner. What are the specific activities of this
168 12 program? What recommendations have been made by the Papago Tribal Council? When
13 were these comments solicited?

14 "PROPOSED ACTIONS:

15 6.4.7 Current plans are to replace the F-4 and F-104 aircraft with newer
16 aircraft such as the F-15 and A-10." (Page 56.)

17 Comment: What is the future schedule for phase-out of these aircraft?

169 18 "6.4.8 Flight simulators are used to provide training to aircrews that
19 historically were performed by actual flight instructors." (Page 56.)

20 Comment: What are the details of the flight simulator program? How many
21 actual flights are eliminated through this program?

170 22 "6.4.9 Damage caused by sonic booms is recoverable from the Air Force."
23 (Page 56.)

24 Comment: This is patently untrue. It is correct that a claims procedure
25 exists through the administrative component of the Federal Tort Claims Act,
171 26 28 U.S.C.A. §2671, et. seq. However, it is clear that this procedure does not
27 provide an adequate remedy for the damage caused by sonic booms. It does not
28 provide recovery for the psychological, sociological, and cultural harms suffered

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1 as a result of military overflights. It does not compensate for the time, effort,
2 and aggravation incurred by reservation inhabitants forced to comply with
3 governmental red tape. It does not compensate for the reduced resources for the
4 Papago people, when, for example, this office is forced to devote its energies
5 towards dealing with Air Force problems. Most notably, the statement takes no
6 account of how often the claims procedure is actually used, e.g., by those with
7 language barriers, literacy barriers, or transportation barriers. A comparison of
8 the number of damage claims filed with actual damages suffered would probably show
9 that these barriers are substantial and that they make the "compensation scheme"
10 a cruel joke for most reservation residents. Here again, instead of meeting the
11 statutory obligation to discuss options for overcoming these barriers (for
12 example, special funding for community education), the impact statement (in what
13 appears to be nothing more than a form paragraph for this subject) glibly assumes
14 that the compensation system works.

15 "7.0 RELATIONSHIP BETWEEN LOCAL SHORT-TERM USES OF THE ENVIRONMENT AND
16 MAINTENANCE AND ENHANCEMENT OF LONG-TERM PRODUCTIVITY: * * * It is possible
17 that low level flights or sonic booms result in some areas not being developed to
18 their full potential; however, it is not possible to evaluate the long-term
19 secondary impact." (Page 56.)

20 Comment: Once again this DEIS ignores environmental impairments that are
21 more difficult to assess because they cannot be exactly measured. As stated in
22 this memorandum, page ten, line 13, evaluation of unquantifiable aspects of
23 environmental harm can be attempted through social science methods. That some
24 areas of the reservation may be in effect abandoned due to Air Force operations is
25 of critical concern for the Papago people.

26 "9.0 CONSIDERATIONS THAT OFFSET THE ADVERSE ENVIRONMENTAL EFFECTS:

27 9.1 National Defense: * * * (Page 57.)
28 . . .

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as a result of military overflights. It does not compensate for the time, effort, and aggravation incurred by reservation inhabitants forced to comply with governmental red tape. It does not compensate for the reduced resources for the Papago people, when, for example, this office is forced to devote its energies towards dealing with Air Force problems. Most notably, the statement takes no account of how often the claims procedure is actually used, e.g., by those with language barriers, literacy barriers, or transportation barriers. A comparison of the number of damage claims filed with actual damages suffered would probably show that these barriers are substantial and that they make the "compensation scheme" a cruel joke for most reservation residents. Here again, instead of meeting the statutory obligation to discuss options for overcoming these barriers (for example, special funding for community education), the impact statement (in what appears to be nothing more than a form paragraph for this subject) glibly assumes that the compensation system works.

"7.0 RELATIONSHIP BETWEEN LOCAL SHORT-TERM USES OF THE ENVIRONMENT AND MAINTENANCE AND ENHANCEMENT OF LONG-TERM PRODUCTIVITY: * * * It is possible that low level flights or sonic booms result in some areas not being developed to their full potential; however, it is not possible to evaluate the long-term secondary impact." (Page 56.)

172 Comment: Once again this DEIS ignores environmental impairments that are more difficult to assess because they cannot be exactly measured. As stated in this memorandum, page ten, line 13, evaluation of unquantifiable aspects of environmental harm can be attempted through social science methods. That some areas of the reservation may be in effect abandoned due to Air Force operations is of critical concern for the Papago people.

"9.0 CONSIDERATIONS THAT OFFSET THE ADVERSE ENVIRONMENTAL EFFECTS:

9.1 National Defense: * * * (Page 57.)

Comment: What one court has called "the overused rubric of national defense,"

Concerned about Trident v. Rumsfeld, 555 F.2d 817 (D.C. Cir. 1976), cannot be used as a shield to hide environmentally hurtful actions. To state that the national defense compels use of the Papago Indian Reservation does not address the real question, that is, how much harm is to be tolerated? How far can the burden of national defense be spread? Are the Papago people alone to pay for the national defense, or should some of the other people who are also being defended pay part of the price in terms of disruption of daily life?

"9.2 Socio-Economic: Although not under active consideration in this statement, the loss of airspace to accomplish the flying mission could force a base closure action. * * * Luke, Davis-Monthan, Williams, and the Tucson Air National Guard provide employment for many people living in their surrounding communities. The table below identifies non-military personnel employed by the Air Force at each installation as of 1 July 1977.

Base	1 July 77 Civilian Employees	Black	Minority Spanish Surname	AMERICAN INDIAN
Davis-Monthan	1739	55	356	9
Luke	1241	46	167	5
Tucson ANG	417	5	64	1
Williams	762	24	55	3

(Emphasis added in table.) (Pages 57-58.)

Comment: The above-quoted section graphically illustrates the unfairness of the impacts of Air Force operation upon the Papago people. Out of the 3,959 civilians who directly benefit from the operations of the above bases, only 18 are American Indians! Those who work for the Air Force bases reap the benefits; the Papago Indians pay the price. As an alternative to the environmental impacts placed upon the Papagos, the military and the Federal Aviation Administration should explore ways to compensate the Papago people -- to pay for use of the air-space.

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1 "10.0 DETAILS OF ANY UNRESOLVED CONTROVERSY:

2 10.1 Papago Actions: * * * The first meeting was held on 6 Feb 1975. The
3 dialogue at this meeting set the stage for continued discussions on a monthly
4 basis. Agreements have been reached with the Papago on the MOA and low level
5 training routes. Meetings are scheduled to continue on a monthly basis to
6 resolve any problems that may arise. (Page 59.)

7 Comment: See this memorandum, page four, line 3; page seven, line 5;
8 page seventeen, line 3. The above statement is largely incorrect.

9 LEGAL ANALYSIS OF PAPAGO LEGAL SERVICES, INC.

10 As stated in the beginning of this memorandum, page two; line 25, this
11 is not the place for an extended discussion of legal theory since this is an
12 administrative procedure and not a court action. Various legal theories have
13 already been presented through previous correspondence, see, e.g., DEIS Appendix
14 C-2. However, it is the position of this office that the Air Force and the
15 Federal Aviation Administration owe a duty to the Papago people to make every
16 effort to ameliorate the environmental impacts to the Papago Indian Reservation
17 from military operations in the Sells Airspace, under at least the following
18 legal theories:

19 1. Due Process clause of the United States Constitution (Fifth Amendment),
20 which states that "No person shall ... be deprived of life, liberty, or property,
21 without due process of law; nor shall private property be taken for public use,
22 without just compensation."

23 2. Equal Protection clause of the United States Constitution (Fourteenth
24 Amendment, Section One), which proscribes the denial to any person of "equal
25 protection of the laws."

26 3. Civil Rights Act, 42 U.S.C.A. §1983.

27 4. National Environmental Policy Act. supra

28 5. Administrative Procedure Act, 5 U.S.C.A. §706(2), which commands courts

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1 of review to "hold unlawful and set aside agency action, findings, and conclusions
2 found to be--

3 (A) arbitrary, capricious, an abuse of discretion, or
4 otherwise not in accordance with law;

5 (B) contrary to constitutional right, power, privilege, or
6 immunity;

7 (C) in excess of statutory jurisdiction, authority, or
8 limitations, or short of statutory right;

9 (D) without observance of procedure required by law;

10 * * *

11 6. Federal Aviation Act. 49 U.S.C.A. §1348(c), which requires that the
12 Administrator of the FAA is to "prescribe air traffic rules and regulations
13 governing the flight of aircraft ... for the protection of persons and property on
14 the ground"

15 7. American Indian Religious Freedom Act, Pub. L. 95-341 (S.J. Res. 102),
16 92 Stat. 469, 42 U.S.C. 1996 (August 11, 1978).

17 8. Executive Orders of July 1, 1874; June 16, 1911; September 2, 1912;
18 June 28, 1926, which established the Papago Indian Reservation.

19 9. Indian trust doctrine, see, Cherokee Nation v. Georgia, 30 U.S. (5 Pet.)
20 1 (1831), Worcester v. Georgia, 31 U.S. (6 Pet.) 515 (1832). See also
21 Winters v. U.S., 207 U.S. 564 (1908).

22 10. Public trust doctrine, see, e.g., William H. Rodgers, Jr. Handbook in
23 Environmental Law, West Publishing Co., St. Paul, Minn. (1977), 170-186.

24 11. Common law doctrine of trespass.

25 12. Common law doctrine of nuisance.

26 13. Air Force Regulation 55-34, "Reducing Flight Disturbances."

27 14. Present and/or future laws of the Papago Tribe.

28 CONCLUSION

29 The Draft Environmental Impact Statement is inadequate. It is not the
30 "detailed statement" of environmental impacts required by the National Environ-

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1 mental Policy Act, that is to say, it does not adequately discuss the probable
2 environmental impacts, alternatives, probable impacts which cannot be avoided,
3 the long-term productivity of the environment, considerations that offset the
4 adverse environmental effects, or the controversy engendered by Air Force
5 operations. The requirements of NEPA can only be met by promulgation of a more
6 detailed environmental impact statement and further public hearings so that
7 knowledgeable public comment can be received and evaluated by those agencies
8 charged with decisionmaking.

9 It is suggested that the Air Force and FAA work to develop more creative
10 alternatives to alleviate the burdens suffered by the Papago people through use of
11 the Sells airspace, such as providing compensation to the tribe for use of this
12 valuable resource. Also, more energy should be devoted to safeguards for respect-
13 ing the current agreements and regulations for aircraft operations and procedures
14 (see this memorandum, page eight, lines 19-28), for outside monitoring of
15 Air Force operations, and for development of new agreements and regulations for
16 protecting the Papago Indian Reservation.

17 This office looks forward to your response to the needs of the Papago people.

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cc: Cecil Williams, Chairperson
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USAF Responses
to
Public Comments

2.0 Responses to Public Comments

The following responses are presented in the same sequence in which the topics were raised by the people who made the comments. Some responses are cross-referenced. An index is provided at the conclusion of the responses.

2.1 Responses

1. **Non Auditory Health Impacts** - There has been no attempt to minimize or omit potential impacts on the human environment in the RDEIS. In those instances where data may have been omitted, it is included in Section 4.0 of this final environmental impact statement (FEIS) as a correction to the RDEIS. See responses 8 and 9.

2. **Population Data Usage in Impact Analysis** - Population data is in Section 2.6.3.2 and Table 2.6-7 of the RDEIS. More detailed population data is provided in response 5.

3. **Mitigation Measures** - Modification of proposed flight tracks for supersonic operations is not a viable alternative for mitigation. Because supersonic operations can occur throughout the Sells MOA, there are no specific flight tracks to be modified. Several mitigation measures were considered and are discussed in Section 6-4 of the RDEIS. Additional mitigation measures were considered after publication of the RDEIS. These are listed in Section 3 of this FEIS.

4. **Subsonic Noise Analysis** - Correct. An assumption of 25% of sorties passing over a single point is a reasonable "worst case" for routes ranging from two to ten miles in width.

5. **Persons Potentially Exposed to Booms** - The Air Force contacted the Tohono O'odham's Community Planner located in Sells, Arizona in February 1988. There are about 5,380 people residing in small towns and villages with a total of 9,273 people in the area. The following table provides a breakout of known population centers under the Sells Airspace:

Sells	2,791	Pisinimo	449
Topawa	333	Gu Vo	326
Hickiwan	296	Quijotoa	285
Ali Chukson	242	Gu Oidak	252
Chuichu	410		

District populations are as follows:

Sells	3,313	Pisinimo	649
Gu Achi	1,229	Gu Vo	583
Sif Oidak	1,051	Schuk Toak	489
Hickiwan	873	Chukut Kuk	230
Baboquivari	856		

Figure 2.6.1 shows supersonic activity is primarily confined to 4,435 square miles of the area. Because the number of people per square mile in the carpet boom area is extremely small, the RDEIS focused on the potential of a person hearing a sonic boom in relation to the two supersonic maneuvering ellipses. These ellipses are portrayed as illustrative footprints and are not to be construed as operating area limits. Supersonic activity occurs throughout the entire Sells MOA. In Section 4.0, Item 1, a revised Table 2.6-5 is provided to show the probability of hearing one or more booms.

Since the 1979 public hearing, there have been few complaints received by the Air Force on flight operations in the Sells Airspace. From 1979 to 1988, there have been less than six formal complaints received per year. The Tohono O'odham Indians tend to submit their complaints through the Tribal Chairman and/or Council--reducing the overall number of complaints into a collective voice. The Air Force recognizes the low number of complaints received could also be due in part to the lack of telephone service in many areas under the airspace. For the most part, complaints are generally received when there is a perceived or actual deviation from existing flight operations. For example, a significant complaint received in 1983 protested the overflight of the Vaya Chin village by two aircraft at supersonic speeds. The Vaya Chin incident was first reported by a phone call and followed by a letter from the Tohono O'odham Tribal Council. Two more recent complaints were received by letter in January and February 1988--protesting increases in flight activity and low-level flights over the villages of Pisinimo and San Simon.

6. Percent Highly Annoyed (Subsonic Noise) - The EPA and the Department of Housing and Urban Development (HUD) have adopted noise levels for protection of people from hearing loss and for limiting annoyance. The procedure used by the EPA and HUD to assess impact of low level subsonic jet noise exposures on people relates the day-night average sound level (DNL) produced by jets to the number of people who would be highly annoyed. This procedure was developed by the National Research Council of the National Academy of Sciences through its Committee on Hearing, Bioacoustics and Biomechanics (CHABA 1977; 1982). CHABA was asked by the National Institute for Occupational Safety and Health (the research arm of the Occupational Safety and Health Administration) and the Environmental Protection Agency (EPA) to consider research that might be performed to examine the effects on human health from long-term noise exposure for industrial workers and the general population, respectively. The procedure is based upon results from several laboratory studies and social surveys. Laboratory tests were designed to explore people's ability to judge the relative annoyance of sonic booms and subsonic aircraft fly-overs. The CHABA chart, which is provided in the RDEIS on Page 4-12, Figure 4.3-2, clearly shows the percent highly annoyed from an A-weighted DNL of 61 dB is about 9% highly annoyed.

Even with 9% highly annoyed, the total number of people remains relatively small. Based on the population data provided in response 5 above, 9,273 people might be subjected to noise. However, the worst-case situation does not impact the entire population--only that portion living under the low level flight operations. These low level routes have been established to minimize

overflight of populated areas (RDEIS, Pages vi and 2-5). Any overflight is to be at "an altitude that ensures at least 1,000 feet above the highest obstacle within a horizontal radius of 2,000 feet of the aircraft." Thus, the 61 dB DNL (A-weighted subsonic noise), as shown in the RDEIS, Table 4.3-1, is for the segments of VRs 223, 239, 243 and 246 that coincide. This area is approximately 765 square miles (statute) (85 miles long and nine miles wide). An actual population count of that area is not available. Therefore, one is calculated as follows: total population of 9,273 minus urban population of 5,384 equals 3,889 people possibly affected. Assuming an even distribution of the rural population across the land, there would be an average of 0.88 persons per square mile. This yields approximately 673 people subject to the worst-case situation. The number highly annoyed would be 9% of 673 or 60 people.

The "Levels Document" was not used to figure the annoyance factors for two reasons. First, the annoyance sections of this document are dated 1961, 1967 and 1971. There is more recent research data, such as CHABA's research (1981/2), available to determine the percent highly annoyed. Next, the "Levels Document" used a significant amount of foreign data to develop its percent highly annoyed charts. CHABA has reported that many of the available foreign studies could be criticized on methodological basis (studies were not adequately controlled for other known risk factors). Studies in the United States primarily concentrated on cardiovascular response to noise, and the results have been contradictory.

7. Supersonic Noise Impacts - We concur with the thrust of the comment as pertains to population. See responses 5 and 6.

8. Sonic Boom Impacts on People - The RDEIS addressed the habituation in relation to the "startled response" from impact noise and not annoyance as noted in the comment. Additionally, the research noted on habituation was not intended as a mitigating factor offered by the Air Force. It provided one aspect of impact noise on the human environment as documented and accepted in the scientific community--including EPA. The Tohono O'odham's (affected population) attitudes are very well noted in the RDEIS in Section 2.6.4, Page 2-40. It is not the Air Force's intent to treat noise impacts lightly, but rather to address all significant aspects of the issues.

The methodology for the calculations is too extensive to incorporate as an appendix. The reference document (Report 4430, Project 07791, Development of C-Weighted Day-Night Average Sound Level Contours for F-15 Air Combat Maneuvering Areas, August 1980) prepared by Bolt, Beranek and Newman, Inc. contains the equations and methodology used to calculate the noise levels. This report was prepared specifically for the Air Force to use in evaluating space average effects of sonic booms. Appendix B (Pages B-1-24 to B-1-33) of the RDEIS also contains the methodology used.

Figure 4.3-2 is correct and is the most current data available to determine the percent highly annoyed from impulsive sounds. As noted in response 6, the annoyance charts provided in the "Levels Document" were not used to calculate

the percent highly annoyed. The CHABA Working Group 84 Report (Assessment of Community Response to High-Energy Impulsive Sounds, 1981) was used to develop Figure 4.3-2. Pages iii and v of the report identify the members of the working group and the Committee on Hearing, Bioacoustics and Biomechanics, including noted scholars like Kryter, Galloway, Johnson and Westervelt.

9. Cumulative Effects of Subsonic and Supersonic Noise - Based on an analysis similar to that used in response 6, the cumulative number of people highly annoyed in the 62 dB area would be 67 and in the 68 dB area, 135.

Based on a literature review conducted by the Air Force on the subject of noise and health, additional information that supports the RDEIS is provided. Dr Shirley Thompson of the University of South Carolina School of Public Health summarized her research team's "evaluation of the epidemiologic evidence available regarding the effects of noise on the cardiovascular system" in a paper given at the May 1983 meeting of the Acoustical Society of America (summary of EPA reports having NTIS designations PB 82-147752, PB 82-147760 and PB 82-147778). Of some 800 potential publications, 83 were chosen for critical review. Each selected article was critiqued independently by an epidemiologist, a cardiologist, and an audiologist. Individual critiques were then integrated for study summary. The conclusion derived by the reviewers and an additional set of consultants was: "Our analysis indicated that studies to date are inadequate for establishing cause-effect relationships between noise and cardiovascular disease. Recommendations made were aimed at improving study designs for future research." In terms of adequacy of current research, Thompson summarizes the results of the evaluation process as follows: "The relatively poor quality of the identified papers is reflected in the individual components and overall ratings of the reviewers.... The proportions of studies meeting more than 50 percent of the evaluative criteria were as follows: on the noise component, six percent of the English studies and 11 percent of the translated research; on the health outcome component, 33 percent of the English and 32 percent of the translated research; and on the epidemiologic methodology component, 42 percent of the English literature and 11 percent of the translated studies. When the lowest of the three component scores is taken as the overall validity score, no study reported in the English literature and only one in the translated literature was rated higher than '4' on a 0-9 scale.... These ratings indicate that the literature is less than fully informative for the task of judging the association between noise and cardiovascular effects." These reports by Thompson represent a milestone in noise research, and hopefully a precedence has been set for future evaluations of research in this area. The bulk of the available scientific evidence suggests that noise levels that would yield "hypertension, ulcers or pregnancy problems" are considerably in excess of those that characterize the Sells Airspace.

See responses 6 and 8 for the reasons why the "Levels Document" was not used to calculate the percent highly annoyed.

10. Sonic Boom Effects on Structures - Comment noted, but disagree.

11. Probable Environmental Noise Effects - See paragraph 2 of response 9.

In the RDEIS (Sections 2.6.2.4.2 and 4.3.3, Figure 4.3-1, and Appendix B-1), the Air Force provides the methodology used to calculate the CDNL values in the revised draft. NOTE: C-weighted day-night average sound level (CDNL) is a measure of environmental noise produced by impulsive sounds, such as sonic booms, that has been found to correlate well with average human response to impulsive noise. As noted in response 8, this methodology was developed specially for the Air Force to calculate the spatial average CDNL value for its supersonic airspace. To better understand the potential noise levels of sonic booms, the Air Force also calculated the C-weighted sound exposure level (CSEL) for individual events--computing CSEL from the sonic boom peak overpressure. The 59 dB CDNL value, as shown in Figure 4.3-1, provides the space average sound level for the area in order to predict the probability of hearing a sonic boom within the maneuvering ellipse. In contrast, the dB values provided by the commenter represent the sound level an individual may hear at one location on the ground rather than the average sound across the entire area. This approach does not lend itself well to predicting the probability of hearing sonic booms across the entire ellipse.

12. Endangered Species (DOI Additions) - Comment noted. Corrections to the RDEIS are noted in Section 4.0 of this FEIS.

13. Topics for Discussion with the Tohono O'odham - The specific topics listed are being used as part of the Air Force's dialogue with the Tohono O'odham. Many of the topics have already come up in discussions between Luke AFB's Point of Contact for Indian Liaison and various tribal leaders including the Tribal Chairman and Community Planner. Movements and changes in route structure are under discussion. Several routes which are now known to conflict with inhabited areas are in the process of being adjusted. All Luke AFB low level routes are now floored at 500 feet above ground level (AGL) minimum where they are over the area. Future plans include efforts to adjust other base routes and establishing a 500 foot AGL minimum altitude for all future low level routes. Additionally, supersonic operations are being reviewed to determine if any changes can be made in this area.

14. Public Affairs Program - The Air Force is anxious to facilitate open communications between itself and the Tohono O'odham. Luke AFB is presently attempting to obtain funding for a full-time liaison person. Tentatively, the job description would call for a person who is knowledgeable about Air Force flight operations and sensitive to the concerns of the residents. The person would be available to visit all districts on a regular basis. Such a permanent position would reduce the problems created by the relatively frequent transfer of active duty Air Force members.

15. Periodic Contact with Organ Pipe Cactus National Monument (OPCNM) - The Air Force understands the concerns of the National Park Service and is presently working with them. The most appropriate single point of contact in the future will be the same individual who serves as the liaison person to the Tohono O'odham.

16. Endangered Species (Fish and Wildlife Service) - See response 12.

17. National Park Service Opposition to Use of OPCNM - The EIS process is designed to allow for the evaluation of alternatives to the proposed action. Banning of all overflights of Organ Pipe Cactus National Monument is not desired due to compression of necessary DOD operations. Procedures have been established to keep aviation generated disruptions to a minimum. Contact has been made with Superintendent Smith and procedures have been implemented to report any transgression into sensitive areas.

18. Coordination with Arizona State Historic Preservation Office (SHPO) - The Air Force has coordinated with SHPO and found the list of sites provided in the RDEIS to be complete and valid.

19. Protection of Endangered Species - While there may not be an abundance of published literature on long-term effects of sonic booms on animals and wildlife, one must not overlook the experiences of 30-plus years of supersonic operations over the Barry Goldwater (Luke AFB) and Nellis AFB Ranges (both of which contain National Wildlife Refuges (NWR)). The Barry Goldwater Range (BGR) provides habitat for a wide range of animals and wildlife, to include the Sonoran pronghorn antelope and peregrine falcon. Fish and Wildlife Service (FWS) comments in 1980 (Section 7 consultation) stated that continued Air Force activities on BGR appear to be in the best interest of the Sonoran pronghorn. The same conclusion has been highlighted in an article entitled, "Planes and Pronghorns Share Vast Luke Range," by Dr Jack Utter et al., published in Arizona Land and People: Magazine of the College of Agriculture, University of Arizona, Volume 34, Number 4, December 1983. Again, the published literature and actual field experiences of Luke and Nellis AFB personnel with the management of their respective ranges indicate sonic booms of the magnitude in the Sells Airspace do not appear to have significant effects on endangered species in the area.

20. Desert Restoration Plan for Aircraft Crashes - In the unlikely event of a crash, the Air Force would take great care to approach the crash site by established roads, trails and/or paths to the maximum extent possible. Off-road travel would occur as a last resort. The extent of restoration will be dependent on the crash site and will be handled on a case-by-case basis. The site's accessibility and proximity to inhabited areas would be major considerations in its partial or total restoration. Strong considerations would have to be given to the recovery cost in contrast to the natural rehabilitation of the site. The Air Force cannot guarantee a specific level of site recovery for potential aircraft crashes.

21. Tribe's Special Meeting on the Sells Airspace RDEIS (14 Nov 88) - The meeting held on 14 November 1986 was not a formal public hearing under the guidance of the National Environmental Policy Act (NEPA) and Council of Environmental Quality requirements. However, the Air Force extended the response time of the public comment period on the RDEIS to 1 December 1986 at the request of the Tribal Vice Chairman in an effort to accommodate this special meeting. No comments were received from the meeting held by the tribe.

22. Inclusion of the 1979 Public Hearing Transcript - The Air Force has included the 1979 Public Hearing Transcript and responses in this section of the FEIS.

23. Reason for Reduction of Supersonic Sorties - The lower number of supersonic sorties reflected in the 1986 RDEIS is not "the result of a different method of computation." It is the result of the Air Force reviewing its flight activities in the Sells Airspace for possible ways to reduce supersonic sorties in the area. Since 1977, some supersonic sorties in the Sells Airspace have been transferred to other approved areas such as the Gladden Airspace. In addition, mission and aircraft changes at Luke AFB in the past few years have also impacted the type of flight operations that are currently being flown in the Sells Airspace. As noted in Table 2.4-2 (Page 2-11) and Section 4.3.3, paragraph four (Page 4-4), the supersonic sorties in the Sells Airspace are projected to decrease even further by 1990, which would be the result of mission and aircraft changes at Luke AFB. The Air Force will continue to review its supersonic flight operations for additional reductions. However, the Air Force cannot guarantee further reductions since flight operations are dictated by a constantly changing enemy threat.

24. Differences in the Number of Sonic Booms (DEIS vs RDEIS) - The sonic boom data contained in the DEIS and RDEIS are indeed different. The RDEIS was produced using research data developed after the DEIS was filed. The Air Force contracted with Bolt, Beranek and Newman, Inc. to develop the Oceana Model for computation of the number of sonic booms that would impact the ground from flight operations. An explanation of this approach ("0.8 booms per sortie") was provided in the RDEIS in Section 2.6.2.4.2 (Page 2-20) and Appendix B (Pages B-1-24 to B-1-33). Special attention is drawn to paragraph two of Section 2.6.2.4.2 which states, "Not all booms created are heard at ground level. Sonic shock waves or rays are created when an object is travelling at a rate greater than the speed of sound. The speed of sound at any altitude is a function of the temperature; decrease in temperature results in a decrease of sound speed, and vice versa. Under standard atmospheric conditions, the air temperature decreases in altitude...." (Refer to the RDEIS for more detail.) The phenomenon of sound waves being refracted back into the atmosphere (never reaching the ground) was not fully understood by the Air Force when the DEIS was filed in 1977. This refraction drastically reduces the number of booms which reach the ground. The study of noise is an ongoing research effort in the scientific community.

25. Number of People Affected by Booms - The booms may occur throughout the area although they will tend to be concentrated within the ellipse. See response 5.

26. Sonic Boom Physiological Impact - Comment noted. See response 9, paragraph two.

27. Name Another Airspace Like Sells - The Air Force flies in much airspace similar to Sells. All supersonic airspace contains subsonic flight activity. This response is therefore focused on supersonic airspace that requires a waiver to fly below 30,000 feet MSL.

Supersonic flights are conducted over similar airspace in: Eglin MOAs, Eglin AFB, FL; Desert MOAs, Nellis AFB, NV; Bullion Mountain (Twenty-nine Palms) and Panamint Valley MOAs, George AFB, CA; Edwards Airspaces, Edward AFB, CA; Reserve and Valentine MOAs and White Sands Missile Range, Holloman AFB, NM; Gandy MOA, Hill AFB, UT; and two other pieces of airspace controlled by Luke AFB known as Gladden MOA and Barry Goldwater Range. The population density of the above airspace is very close (Gladden has over 8,000 people within its boundaries) to the Sells Airspace or higher (Panamint Valley). Note, this data is included in the RDEIS (Section 1.5, Page 1-11). Also, Gandy MOA in Utah partially overflies other Native Americans Lands.

28. **Day-Night Noise Level** - All day-night average sound level criteria developed by EPA and used by Housing and Urban Development (HUD), Department of Defense (DOD), Department of Transportation (DOT), and others are long-term, preferably annual averages. The use of the term DNL is in accordance with American National Standard S3.23-1980, "Sound Level Descriptors for Determination of Compatible Land Use." The term is used for consistency of understanding and comparison throughout the United States.

29. **LEQ Values vs DNL Values** - DNL and LEQ methodology are equally valid in predicting health effects; however, the DNL methodology is more useful in that it imposes penalties for nighttime activities. As there is subsonic activity in the Sells Airspace at night, the DNL methodology is applicable.

30. **Estimate of Annoyance** - The Air Force is retaining the MTRs at their present altitudes where they pass over the Tohono O'odham area. However, there will be some increase in noise level due to increased sortie rates on some routes. The Air Force estimate of the noise level for flight at 500 feet AGL has been recalculated. A revised Table 4.3-1 may be found in Section 4.0 of this FEIS.

31. **Percent Highly Annoyed From Cumulative Noise** - See response 9, paragraph 1.

32. **Noise Impact** - The methodology in the RDEIS is the recognized technique for analyzing noise impact. It never explicitly takes into account any special or unique feature of the affected people or of an area. Nor does the comment suggest how that should be done in this case.

In addition, airspace within the United States is public domain irrespective of ownership of the underlying land. Furthermore, the Executive Order of 1958 established the FAA as manager for all airspace overlying the United States. The FAA has authorized the Sells Airspace for use as a military operating area.

33. **Aircraft Noise Impacts on Indians Culture, Traditions, and Religion** - The Air Force recognized the possibility of impacts on the traditions, religion, and psychological well-being of the Tohono O'odham. They therefore secured the services of Dr Bradley Blake, an expert in this field from the University of New Mexico, to analyze these factors. Dr Blake's findings are incorporated in the consideration of impact and in proposals for mitigation in the RDEIS and this FEIS.

34. Sonic Boom Damages - When aircraft flights cause structural damage to property, a claim may be filed with the Air Force Claims Office at Davis Monthan AFB in Tucson, Arizona.

35. Aircraft Buzzing of Hikers - The Air Force exerts close control over pilot training missions to ensure maximum effectiveness with least cost. Briefings on restrictions imposed to avoid injury and annoyance to people are frequent and emphatic. Military aircraft are not authorized to operate near the "scenic route" in the OPCNM or over the park headquarters. Written instructions require pilots to maintain a lateral distance of 3,000 feet and a vertical distance of 1,000 feet from people, vehicles, structures and livestock. However strict the controls, a pilot may occasionally break the rules out of enthusiasm during a mission. The Air Force disciplines such offenders whenever it can identify them. It should also be noted that tactical navigation flights are authorized at low levels, and the pilots observed might not have been intentionally buzzing. By notifying the liaison office when such an incident occurs (giving the location, date, time, and type and tail numbers of the aircraft, if possible) prompt action will be taken to correct the pilot.

36. Noise Impact on Classrooms - As noted in the RDEIS (Figure 2.3-3, Page 2-7), the Air Force has established avoidance areas around several Tohono O'odham towns and villages in an effort to reduce impacts on schools and other assembly areas. This topic is also covered in more detail in the RDEIS (Section 4.3.4, Paragraph 3, Page 4-9). The Air Force will continue to work to reduce potential impacts and identify future areas of concern through the proposed liaison official.

37. Request for Pictures and Literature of Aircraft - Luke AFB has collected photos from other Air Force agencies. The material has been delivered to the school. In the future, this type of program will be managed by the Air Force liaison person.

38. Noise Scares Animals - It is necessary for the Air Force to train its pilots in a realistic environment. The Air Force has assessed the effects of supersonic and other aircraft noise on domestic animals and wildlife. Through the Air Force's extensive literature review and studies, the Air Force anticipates no significant adverse impacts from noise in the Sells Airspace. See response 19.

39. Bombs and Broken Windows - It is true that some supersonic flights may cause some windows to break. The Air Force recognizes this point in the RDEIS (Section 4.3.7, Pages 4-17 and 4-18) and notes the individual with a broken window may file a claim against the government for recovery of damages.

High-flying jets practicing air-to-air combat do not carry bombs, nor do the low-flying jets from Davis-Monthan AFB practicing low altitude tactical navigation. Aircraft flying along low level routes to the Barry Goldwater Range may carry practice bombs, which have only a small spotting charge. See responses 19 and 38.

40. Bombs & Broken Windows - See responses 19, 38 & 39.

41. Hearing Loss - Comment noted. This topic is covered in detail in the RDEIS (Section 4.3.4, Pages 4-9 to 4-13). The Air Force has no new information or data to contradict the RDEIS.

42. Scared Animals - See responses 19 and 38.

43. Scared Animals and Bombs - See responses 19, 38 & 39.

44. Scared Animals, Broken Windows and Hearing Loss - See responses 19, 38, 39 and 41.

45. Scared Animals, Broken Windows and Other Areas - See responses 19, 27, 38 and 39.

46. Aircraft Crash, Scared Animals and Hearing Loss - Hazard from aircraft crash is covered in the RDEIS (Section 4.4.1, Page 4-19). See responses 19, 38 and 41.

47. Scared Animals, Broken Windows and Hearing Loss - See responses 19, 38, 39 and 41.

48. Animals - See responses 19 and 38.

49. Practice in Other Areas - See response 27.

50. Omission of 1979 Public Hearing Transcript - See response 22.

51. Submission of 1979 Public Hearing Transcript - See response 22.

52. Extension of Public Comment Period - See response 21.

53. Rural People's Exposure - A criteria used by the Air Force to select special use airspace is for the airspace to "be sparsely populated--so that aircraft operations will have the least possible effect on people." (See RDEIS, Section 1.5, Page 1-11.) This is not the only criteria used to select airspace; seven other points were identified in the RDEIS. Optimally, the Air Force would prefer to designate its training areas in an area free of general aviation airways (airline routes) and other aircraft not participating, which contain excellent weather conditions for flight operations. The Sells Airspace meets this criteria and is an optimum area for training aircrews.

In Arizona and in nearby states, much airspace which is not used for commercial air routes and does not overlie densely populated areas is used for DOD aircrew training. Where Air Force bases and Navy air stations are located near coastal waters, a significant amount of aircrew training is done over water. Training over land is still required to maintain a realistic training environment for aircrews. The needs of national defense require the Air Force and other services to do a great deal of training of aircrews. This activity does indeed cause noise over many areas. However, those other airspaces are not within the scope of this EIS and not incorporated in this RDEIS. This RDEIS is concerned with the potential environmental impacts of flight operations in the Sells Airspace.

54. Flight Operations Move to the West - There are many military training routes (MTRs) and military operating areas (MOAs) located in the eastern part of the United States from New York to Florida. Most Air Force bases, Naval air stations and Marine Corps air stations require special use airspace to train aircrews. This special use airspace needs to be close to the base hosting the aircraft as a cost-saving measure. See response 27.

55. Mirana Helicopter Flight Operations - Because Mirana's helicopters are not flying through the Sells Airspace to reach the Barry Goldwater Range, those flight operations were not included in the Sells RDEIS. The Army has stated that their helicopter operations are being flown north of the Tohono O'odham Lands.

56. 1979 Hearing Comments - During the 1979 DEIS public hearing, many speakers identified areas of disagreement with its conclusion--questioning its health effects, number of sonic booms, amount of low-level flying, and the noise being created. The Air Force has since conducted studies to collect data to describe supersonic flying, what occurs when an aircraft flies supersonic, effects of sonic booms, and the number and intensity of sonic booms that may reach the ground. A literature review has also collected the results of other scientific studies on key subjects such as noise effects on humans, animals, and structures. Additional time was used to revise the original (1979) draft and file the revised EIS.

57. Effect of Aircraft Emissions on Grass - Comment noted. There is no known research data in the scientific community that supports this assertion.

58. Effect of Aircraft Noise on an Unborn Child - Comment noted. This is not the opinion of the scientific community, which has spent years doing research in this field.

59. Fly Somewhere Else - Noise is a natural consequence of aircraft flight operations and is not directed intentionally against any particular group of people. As noted in responses 27, 53 and 54, the Air Force operates aircraft throughout the United States over many areas similar to the Tohono O'odham area.

60. Changes in Flight Routes - The Air Force is studying the proximity of Tohono O'odham dwellings and villages to MTRs. Discussions with the Tohono O'odham Community Planner have identified several previously undisclosed areas of conflict. Changes are being made to adjust routes as necessary to avoid noise disturbances. This topic will continue to be an area of concern of the Air Force and efforts will be continued by Luke AFB to identify problem areas.

61. Clarify Aircraft Flight Sorties Trend - Table 2.4-2, Page 2-11, of the RDEIS shows the supersonic sorties will decrease by 1,170 by 1990 from the 1988 figures. Subsonic sorties will increase by 5,564 sorties by 1990 compared to 1988. Refer to the RDEIS, Section 1.4, Page 1-10, for the specific types of subsonic military flight training performed in the Sells Airspace. The increase in subsonic sorties in the Sells Airspace will not necessarily increase the level of noise at ground level because the aircraft will be flying at a variety of altitudes.

62. Public Comment Period - The deadline for submission of comments was changed twice, first from August 12 to November 15, and then finally to December 1, 1986. The first change was made when the date for the public hearing itself changed, so participants would have time after the hearing to submit comments based on what they heard at the hearing. The second change was made at the request of the Vice Chairman of the Tohono O'odham, so the results of their own meeting could be submitted. This last change was acknowledged in a November 6, 1986 letter to Luke AFB, from Strickland and Altaffer, P. C., attorneys for the Tribe.

63. Long Delay to File RDEIS - See response 56.

64. Develop Additional Routes - The desire to see all MTRs moved away from the Tohono O'odham is understandable. Less than 21% of the length of all Luke AFB MTRs lies over Tohono O'odham land. Total movement of the routes out from under Sells MOAs is not possible due to other habitation or limitations on operational approaches to the restricted areas to the west of the Tohono O'odham districts. The routes do traverse this airspace, and they basically follow three routes to avoid local habitation. These are being carefully reviewed with the assistance of tribal representatives. Changes are either planned or being made in those areas of severe disturbances.

65. Altitude Blocks of Flight Operations - Subsonic flight is all flight which does not exceed the speed of sound. It does not produce a sonic boom but may produce jet noise on the ground. Supersonic flight exceeds the speed of sound, and as it does so it produces a boom which may be heard on the ground.

There are three types of airspace with which this EIS deals. The Sells Airspace, also known as the MOA, ranges from 3,000 feet AGL (Above Ground Level) to 51,000 feet MSL (Mean Sea Level). MTRs generally begin at 500 feet AGL and may range as high as 9,000 feet AGL (there are two exceptions--to 100 feet AGL--within Sells). These Low Altitude Tactical Navigation (LATN) areas range from 300 to 1,000 feet AGL.

Supersonic flight over the Sells area will occur only above 10,000 feet AGL. Subsonic flight may occur anywhere in the MOA, MTRs or LATN areas.

66. Request for More Public Hearings - The purpose of the public hearing process is to provide the public with an opportunity for input into the environmental impact analysis process. It is the Air Force position that the comments received at this hearing and written comments received in the mail are representative of those which might be written by people living in other parts of the affected area. Additionally, bus transportation to and from the public hearing was provided.

67. Flights Below 3,000 Feet - Flights do occur below 3,000 feet above the ground. None of these flights are supersonic. Supersonic flights occur only at 10,000 feet MSL and above. See response 65.

68. Noise Impact on Infant's Health - There is no evidence to support the comment that impulsive noise would cause damage to the tissue in an infant's heart. Nor is there evidence to support the assertion that sonic booms would cause an infant's heart rate and blood pressure to increase to unsafe levels.

69. Flight Routes - Many of the flights under the Sells Airspace do fly on specific routes; however, these routes may be as much as eight miles wide. The width is necessary not only to allow for realistic training, but also to provide room to allow the aircraft to fly around inhabited areas. Other, slower flights do practice their maneuvers under the Sells MOA but often do not fly a particular route. See response 65.

70. Airspace Designation - The Tohono O'odham area underlies the Sells Military Operating Area (MOA), which runs from the Baboquivari Mountain west to Ajo. The northern boundary is a line eastward from Ajo airport to Ventana then southeast to north of Schuchk. These are approximations. The exact area is explained in the RDEIS (Figure 1-1, Section 1.2.2, and Appendix G). The 3,000 feet AGL, referred to in the RDEIS, is the bottom of the MOA. There are other authorized flights in MTRs, and LATN flights may fly anywhere except the no-fly areas. See response 65.

71. Public Relations Office - See response 14.

72. Supersonic Airspace Designation - There is no separate designation for the supersonic airspace. See responses 65 and 70.

73. Impact on Culture and Traditions - See response 33.

74. Designate Airspace Corridor - Aircraft flying the low level routes have leeway in the route widths. Several of these routes are near Highway 86, and flights will thus be seen along the route. This leeway, plus the slower low level training flights, may make it appear that aircraft are not flying specific routes. See responses 65 and 69.

75. Adobe Home vs Conventional Structure - The study team in 1977 did not find any significant differences between the reaction to sonic booms by the adobe house used in the experiment from that of a conventional house.

76. Study Procedures - This information may be obtained from the literature listed in the RDEIS on Pages R-1 to R-3. The literature should be available from a local library.

77. Questions Concerning Process - The Air Force decision maker will consider all data and comments gathered during the process prior to rendering a record of decision.

78. Empathy - The Air Force is aware of the importance placed on quiet and serenity in the Tohono O'odham way of life. One of the purposes of establishing the liaison position would be to ensure that the Air Force does not lose sight of these types of concerns.

79. Live in the Area - The Air Force takes very seriously the comments about impacts on residents. The proposed efforts in noise reduction and in establishing a liaison position are designed to mitigate the adverse effects.

80. Physical and Mental Anguish - Claims against the Air Force, for whatever reason, will be processed in accordance with Air Force regulations. Research is continuing in this area; however, there is no evidence in the scientific community to support a claim for actual damage.

81. Claims for Damaged Homes - (The proper transcription should be "HUD" homes, not "hut.") An inspecting government engineer recommended to the people at the time of our visit, upon discovering structural deficiencies, that they could file against HUD, and how to do this. We were told that they have tried, but nothing was resolved. Note: This visit was right after the boom, and was for the purpose of assessing damages and to find out what happened.

82. Contract or Agreement - The Air Force has no knowledge of a formal agreement or contract. Luke AFB records do show a cordial working relationship in middle and late 1977, with a great deal of correspondence and numerous meetings. A set of terms of reference, which led to the Federal Aviation Administration approval of the establishment of the Sells Low Military Operations Area, is contained in a memorandum from the Papago Legal Services dated September 8, 1977.

83. Publicity of Public Hearing - A wide variety of methods was used to publicize the hearing, including newspaper articles and radio broadcasts. Fliers and posters were distributed in the various villages. In addition, the Air Force arranged for buses to go to various areas to pick up people who might not have had transportation.

84. Claims Process (Red Tape) - The procedures for processing claims against the Air Force are set forth in detail in regulations. The amount of documentation and substantiating evidence needed to support a claim will vary, depending upon the type of claim and the dollar amount. Naturally, more complicated claims and higher dollar value claims will require more documentation. The speed of adjudication will depend upon the approval levels within the Air Force. The larger the dollar amount claimed, the higher the approval level.

In general, smaller claims will be paid faster than larger ones. All claims should be processed in a timely manner.

85. Vaya Chin Claim - Comment noted.

86. Sonic Boom Studies on Indians - See responses 33 and 80.

87. Air Quality Changes - Concentrations of air pollutants created by Air Force aircraft are considerably below the federal and state air standards.

88. Restoration Work After Crashes - See response 20.

89. 1979 Public Hearing Comments - See response 22.

90. Closer Cooperation, More Information - Since the hearing in 1979, the Air Force has been conducting a number of studies which are now reflected in the RDEIS. There was limited contact while these studies were being performed. More recently, the Air Force has been working closely with the Tohono O'odham. The variety of flights and the number of airfields from which the planes fly preclude giving this schedule in advance.

91. Eliminate Flights Around Villages - All of the villages referenced in this comment plus numerous others have now been designated as no-fly areas.

92. Low Level Flights Over Schools - Since this concern was voiced, the Air Force has emphasized a greater awareness of inhabited areas along the low level routes. Buzzing or low-flying acrobatics over towns and schools are not condoned. Any occurrence of this nature should be reported to the liaison person with as much detail as to time, aircraft colors, type, shape, etc. Also, since the time of this comment, the Air Force has moved a large number of supersonic operations elsewhere, reducing the incidence of sonic disturbance. See response 36.

93. Train Somewhere Else - The Air Force has reduced both overflights and supersonic operations since Mr. Emanuel's comments. It is not feasible to go further south, as that would encroach on Mexican airspace. Other training areas are being used to a far greater extent than in 1979. See responses 27 and 54.

94. Why Planes Do Not Fly Over Large Cities - The training being conducted on the Goldwater Range requires certain flight envelopes or approaches. The routes which partially transit the Sells Airspace provide the necessary distance and altitude for the needed training. The range users do not deliberately fly over any populated areas. See response 53.

95. Chairman of Hearing - As the proponent, the Air Force is charged with the responsibility for conducting the public hearing. No offense to local customs or discourtesy was intended. This misunderstanding was corrected for the 1986 hearing, when the Tribal Vice Chairman opened the hearing and introduced the panel.

96. Future Operations - Future operations of the Air Force within the area of concern are set forth in the RDEIS, Pages 2-9 to 2-12, Section 2.4.3, and Table 2.4-2.

97. Claims Procedures - Claims are reviewed and, if determined to be the result of sonic booms or even low level flying, are paid. There have been 13 claims paid since 1 October 1980.

98. Dialogue Between the Air Force and Indians - Continuous dialogue has been difficult due to the many changes in personnel. The establishment of a full-time permanent liaison would reduce some of these difficulties. Once established, the Air Force expects the liaison position to remedy this type of concern.

99. Claims Procedures - See response 84.

100. Non Auditory Health Effects - See responses 1, 9 and 33.

101. Hold More Public Hearings- For comments on public hearings, see responses 66 and 83; for comments concerning alternatives, see responses 23, 27 and 54; and for comments concerning airspace use, see responses 32, 54 and 64.

102. Stop Flights Over Schools- The Air Force adheres very strictly to the requirements to avoid inhabited areas on its low level routes. Although Air Force regulations allow aircraft flight within 500 feet of structures, a more restrictive flight clearance of 1,000 feet is being maintained from all structures under the Sells Airspace. The 1,000 feet may be either vertical or horizontal. This is done for safety and to reduce any disturbance that may be caused by the flight. Any noted deviations from these standards should be provided to the liaison person for investigation. See responses 6, 36 and 92.

103. Eliminate Flights Around Villages- See response 91.

104. Do You Carry Bombs - See response 39.

105. Effects of Sonic Booms - The effects of sonic booms are fully outlined in the RDEIS, Sections 2.6.2.4.2 and 4.3.4. See also responses 8 & 9.

106. Eliminate Flights Around Villages - Comment noted. See response 91.

107. Sonic Boom Damage to Home - As of 1988, individual claims records prior to 1980 have been destroyed. Therefore, there are no current records on the claim filed by Ralph Antone. Records show all claims submitted to the Air Force prior to 1979 have been fully processed and adjudicated.

108. Where Do Planes Fly - The Air Force provided a comprehensive answer to this question at the 1979 Public Hearing--stating extensive, thorough control of pilots flying the airspace is maintained. Paragraphs 2.4, 2.5 and 6.4 of the RDEIS provide additional information and also update the earlier information. See response 35.

109. Eliminate Flights Around Villages - See response 91.

110. Two Aircraft Flying Together - The basic flight element for combat is two aircraft. Also, when training takes place in a single seat aircraft, an instructor pilot flies in an accompanying airplane.

111. Use Range as an Alternative - Luke is the busiest tactical training base in the free world. While much airspace, including but not limited to the Sells MOA, is devoted to Luke's operations, utilization of assigned airspace is higher for Luke than for any other tactical base. Thus, while aircraft are flying low-level over the area, other aircraft are training in air-to-ground gunnery in the ranges. Also, many of the aircraft flying low-level over the area are merely doing so enroute. See response 94.

112. Burden on the Tohono O'odham - These concerns would be alleviated somewhat with a full-time liaison position. The liaison person would periodically visit the districts to attend to concerns and complaints.

113. Sonic Boom Study on Adobe House - See response 75.

114. Impartial Engineering Evaluation - Even if civilian engineers were contracted to perform the inspection, a bias could be claimed as they would be paid by the Air Force. Policy for review of claims is not dictated by Air Force directive but rather by federal statutes. In particular, see 10: USC 2733.

115. Engineers at Davis-Monthan - Captain King's statement was partially incorrect; there are military engineers in Air Force Civil Engineering Squadrons. But Air Force engineers, civilians or military, are obligated by their professional ethics to give impartial findings.

116. Sonic Boom Briefings - The Air Force did not provide such advice prior to the start of its supersonic activity. Since that time, it has endeavored to respond to any requests for information. The creation of a full-time liaison between the Tohono O'odham and the Air Force could serve an educational function as well.

117. Sonic Boom Briefings - See response 116.

118. Human Rights Violations - The Air Force conducts its activities in accordance with applicable laws and regulations which are designed to protect human rights. This RDEIS, involving public hearings, is part of that process.

119. Legal Requirements of DEIS - See responses 9 and 33.

120. Will There Be More Analysis - Extensive additional studies and research have been conducted to develop the RDEIS. See response 56.

121. Does the DEIS Stand Alone - See response 56.

122. Lack of Depth in DEIS - In response to comments of this nature, the Air Force has used newer studies in formulating the 1986 RDEIS. See response 9.

123. Claim Process (Red Tape) - The claims process is internal to the Air Force. Tohono O'odham procedures to initiate claims are within their prerogative. The proposed liaison officer, while not empowered to solicit claims, would certainly be available for assistance in claim completion.

124. Psychological Harm to Inhabitants - There is no scientific evidence to support elderly or youthful susceptibility to sonic booms. Scientific consensus demonstrates that individuals cannot be stereotyped in this respect. See also responses 9 and 68.

125. Sonic Boom Harmful to Children - See responses 94 and 124.

126. Contract or Agreement - See response 82.

127. Who Designates Villages To Be Circled - Prior to 1979, some communities were circled as a result of discussions between the Tohono O'odham and the Air Force. Since the 1979 DEIS hearing, additional communities have been added as a mitigation measure. It is expected that the liaison officer will continue to work on these areas with the Tohono O'odham. See Figure 2.3-3, Page 2-7, of the RDEIS.

128. Who Designates Villages To Be Circled - See response 127.

129. Do You Carry Bombs - The answer provided by the Air Force at the 1979 Public Hearing is still correct. See also response 39.

130. Circling of Villages - The response provided by the Air Force at the 1979 Public Hearing is still correct. See responses 91 and 127.

131. Medicine Men Opinion - The 1979 and 1986 Public Hearings provided the members and experts of the Tohono O'odham community the opportunity to comment. Solicitation of specific interest or cultural groups was not made. See response 66.

132. The EIS Process - The period between 1979 and the present was used for additional studies, research, and data collection. The record of decision will be based on the FEIS.

133. The EIS Process - See response 132.

134. Department of Interior (DOI) Comments - Between 1979 and 1986, the Air Force contacted the DOI, which responded to the RDEIS. See DOI letter dated August 11, 1986, filed in Section 2.0 of this FEIS.

135. Cost of Flight - Recent figures on the costs of jet aircraft operations are about \$1,460 an hour for the F-5, \$6,250 for the F-15, and \$2,542 an hour for the F-16. In light of the high cost of operating these modern jet fighters, it is easy to see why the Air Force wants to get the best, most cost-effective training accomplished in every hour of flight. The days of just being able to get in an airplane and fly are over. Each flight is now very carefully planned, and all the items to be accomplished are carefully reviewed. The planning for each flight often takes 2 to 3 times as long as the flight.

136. Contracts or Agreements - See response 82.

137. Sonic Boom Reductions - See responses 23 and 24.

138. Start of Sonic Booms - Despite Luke's conversion to all supersonic aircraft, the incidence of sonic booms on the Tohono O'odham Lands has dropped greatly since 1979. Supersonic activities have been occurring since the late 1940's, when the F-100 arrived at Luke. Since the 1979 hearing many supersonic missions have been moved to other flying areas. Also, activities are now planned to cause the least noise disturbance on the ground.

139. Organ Pipe Cactus National Monument Impacts - The RDEIS now addresses these impacts (Sections 2.6 3.7 and 2.6.6). Efforts by the Air Force have resulted in lessened impacts (see U. S. Department of Interior Fish and Wildlife Service letter, June 24, 1986, and National Park Service letter, October 28, 1986, filed in Section 2).

140. Added Protective Status for Organ Pipe - See response 139.

141. Unique Nature of Organ Pipe Cactus National Monument - See response 139.

142. Unique Nature of Organ Pipe Cactus National Monument - See response 139.

143. Unique Nature of Organ Pipe Cactus National Monument - See response 139.

144. Public Hearing Process - NEPA requirements will be totally complied with.

145. Unique Nature of Organ Pipe Cactus National Monument - See response 139.

146. Letters Not Included - The referenced letters have been included in this FEIS. In addition, input from the Park Service was obtained in 1983, and a review of the RDEIS was obtained in 1986. These letters are also included in the FEIS.

147. Impact on Monument - See response 139.

148. Complaints from Monument Visitors - See responses 17 and 35.

149. Organ Pipe Cactus National Monument Impacts - See response 139.

150. Complaints from Visitors - See responses 17 and 35.

151. Current and Future Operations - See Table 2.4-2, Page 2-11, and Section 2.3, Pages 2-2 through 2-8, in the RDEIS.

152. Inversion of Impact Statement Meaning - Comment noted.

153. Regular Meetings With Indians - See response 98.

154. Claims for Damages - See responses 14, 84 and 123.

155. Flights Over Rural Areas - See responses 27, 33, 53, 54 and 94.

156. Oppose Reservation as a Training Area - The term "acceptable" as used in the text does not refer to environmental factors, but rather operational ones--such as proximity to the installation from which aircraft are flying.

157. Training Below 3,000 Feet - The Air Force is aware of the impact of our overflights on the environment and on the Tohono O'odham people. The RDEIS has been rewritten to make this concern more clear. See, for example; Pages ii through v, 2-40, and 4-11 through 4-18 in the RDEIS.

158. More Proposals - The Papago Legal Services letter of September 8, 1977, expresses the position outlined in the question; however, the Air Force has no record of agreeing to provide funds or to consider Papago Legal Services as an intermediary to any extent beyond that actually performed in 1977-78. Meetings were broken off at the request of Papago Legal Services in a memorandum dated May 11, 1978. The Air Force continues to implement mitigation measures through changes made on a regular basis to reduce the noise impacts. Recognizing the need for continuing dialogue with the Tohono O'odham Indians, the Air Force proposes establishment of an Indian liaison official to serve between the users of the airspace and occupants of the underlying lands. See response 14.

159. Data on Sonic Booms - More accurate data has been obtained and is included in the RDEIS. See Sections 2.6.2.4.2 and 4.3.3. See also responses 8 and 9.

160. Claims for Damage - Comment noted. See response 34.

161. Fear of Aircraft Hazards - More accurate data has been obtained and is included in the RDEIS. See Section 4.4. See responses 6 and 9.

162. Aircraft Noise Impacts on Indian Culture - See response 33.

163. Rural People's Exposure - See response 53.

164. Physiological Impacts - See responses 6 and 9, and Section 4.3 of the RDEIS.

165. Fear of Aircraft Hazards - See response 161.

166. Overflight of Sensitive Areas - See Sections 1.2.2.4 and 6.4.1.3 of the RDEIS. See response 35.

167. Regular Meetings with Indians - See response 98.

168. Regular Meetings with Indians - See response 98.

169. Future Phase-Out of F-4 and F-104 Aircraft - See Table 2.4-2 in the RDEIS.

170. Flight Simulator Program - At present, each new student in the F-16 aircraft, the one most commonly flown in the Sells Airspace, receives between two and twelve flights in the simulator. It would be fair to state several of these would have to be flown in the Sells Airspace if simulators were not used.

171. Recovery of Damages - Under the Federal Tort Claims Act, a cause and effect relationship must be established to support liability. Absent proof of such a relationship, claims will be denied.

172. Evaluation of Unquantifiable Aspects - Comment noted. See also response 9.

173. Harm To Be Tolerated - See responses 53, 54, 64 and 94.

174. Indian Benefit from Air Force Bases - The use of airspace above certain altitudes is not an item for which compensation is required or appropriate. It is basically owned and controlled by the United States rather than the individual property owners. See response 32.

175. Monthly Meetings with the Indians - The statement by Papago Legal Services is correct; by the time the DEIS was published, the meetings had been discontinued. Paragraph 10.1 in the RDEIS has been rewritten to reflect the situation as it exists. See responses 98 and 158.

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3.0 Potential Mitigation Measures

In the RDEIS, the Air Force listed five mitigation measures completed since the EIS process began and three mitigation measures to be considered. The Air Force was able to implement several measures, between the filing of the DEIS and RDEIS, which evolved from comments offered at the 1979 public hearings. As a result of comments made at the public hearing in 1986 and during the public comment period, additional mitigation measures have been developed for inclusion in the FEIS. After careful consideration and study of potential mitigation measures, the Air Force has categorized the potential mitigation measures as follows:

- I. Accomplished Actions
- II. Continuing Actions
- III. Proposed Actions

3.1 Accomplished Actions. Three of the five accomplished actions, as set forth in Section 6.4.1 of the RDEIS, now fall into the continuing actions category or have been broken out in several separate recommendations in order to be more responsive to particular comments received. The remaining two accomplished actions that require no further action are:

3.1.1 Raise Base Altitude. The RDEIS, at Section 6.4.1.1, identifies this completed action. The original Sells Low MOA proposal was to establish a base altitude of 100 feet AGL; however, at the insistence of the Tohono O'odham Indians, it was modified to establish a base altitude of 3,000 feet AGL. This action also raised the minimum altitude from 1,500 feet AGL to 3,000 feet AGL and above for: (1) aircraft transiting the Sells Airspace to the Barry Goldwater Range, (2) aircraft flying medium altitude visual/radar navigation routes, and (3) aircraft flying routes designed for reduced weight flights.

3.1.2 Daylight/Alternate Scheduling. The RDEIS, at Section 6.4.1.4, identifies this completed action. Air combat training (ACT), which produces sonic booms and associated overpressures, is limited to daylight hours and is now also scheduled in Restricted Areas R-2301E, R-2304, and R-2305, and in the Gladden Airspace when these areas are available. ACT is scheduled in the Sells Airspace only when Restricted Airspace R-2301 is being fully utilized and no other airspace is available.

3.2 Continuing Actions. Three of the five actions listed as accomplished in the RDEIS are in fact continuing actions. Use of flight simulators (one of the actions listed as proposed) was, in fact, already begun. Two additional continuing actions have been identified as a result of reviewing the DEIS, RDEIS, transcripts of public hearings, and comments. These actions were initiated in the 1979-1986 time frame but were not listed in the RDEIS as either accomplished or proposed. The six continuing actions follow:

3.2.1 Reduced Supersonic Sorties. See responses 3, 7, 23, 61, 92, 93, 96, and 138.

The RDEIS, at Section 6.4.1.2, identifies a 2% reduction in sonic booms as a result of the prohibition of functional flight checks in the Sells Airspace. Also, F-15 aircraft engaging in aerial tactics remain subsonic until within 17-20 nautical miles of each other, thereby reducing the area over which sonic booms can occur by about 60%.

Supersonic sortie reduction occurred in Sells MOA/ATCAA by movement of numerous flights from Sells to the Gladden Airspace northwest of Phoenix. Also, the incidence of supersonic operations increased within the Barry Goldwater Range complex. By reducing the number of sorties being accomplished within Sells, a considerable reduction in supersonic activity resulted.

Additionally, the increased use of Sells by the F-15E will further reduce supersonic sorties, as these missions are mainly low altitude and subsonic in nature.

3.2.2 Pilot Briefing Programs. See responses 35 and 135.

The RDEIS, at Section 6.4.1.3, detailed a program wherein individual squadron briefings and briefing rooms contained maps to depict the exact location of designated noise-sensitive areas. The RDEIS reported pilots at Davis-Monthan and Tucson IAP were aware of the restrictions.

The continuing action contemplates regular, periodic briefings to the major user squadrons at all five home bases regardless of service. Visits to each unit by a knowledgeable briefer will enhance the awareness of the commanders and pilots about the noise sensitive areas. This briefer will normally be the single point of contact discussed in Sections 3.3.1.1 and 3.3.1.2 below.

3.2.3 Public Affairs Program. See responses 14 and 37.

The RDEIS, at Section 6.4.1.5, sets forth a cultural exchange/awareness program wherein official programs were initiated to supplement private programs. These valuable programs helped both the Indians and Air Force personnel (and families) increase understanding of their ethnic, cultural, social, and religious diversity. These programs should not be listed as accomplished actions in this FEIS. They have an ongoing mission and may need periodic support and encouragement from leaders in both groups.

3.2.4 Flight Simulators. See response 170.

In the RDEIS, at Section 6.4.2.3.1, use of flight simulators was a proposed mitigating action. They provide an additional adjunct to quality training without increasing flying sorties. The concept is used to the maximum extent possible not so much to replace flying activities as to increase aircraft systems proficiency through activity that would otherwise have to be conducted in an aircraft. As the quality of simulators increases to match aircraft capabilities, their use becomes even more effective. The Air Force anticipates continued use of simulation to enhance aircraft systems knowledge without corresponding flight increases.

3.2.5 No-Fly Areas. See responses 9, 36, 127, and 130.

Numerous complaints were voiced at the 1979 public hearing concerning the disruptive effect of military overflights on Tohono O'odham settlements. In response to these comments, the Air Force identified a number of communities as no-fly zones. These zones were instituted with greater than FAA-required separation (1,000 feet vertically, 2,000 feet horizontally) from buildings. Minimum altitude over these zones is 3,000 feet above ground level, and horizontal boundaries extend at least a mile from the border of the settlement or village. Initially, ten such zones were identified and posted. Since that time the number has grown to 23.

Monitoring of settlements for population changes continues. Air Force personnel work to identify which communities are inhabited and which may no longer be inhabited. This work may lead to either additions or deletions to the present no-fly areas.

Through this ongoing dialogue the Air Force discovered that there is seasonal movement of some segments of the Tohono O'odham populace. This movement is due to climatic conditions and growth and grazing patterns. It is possible that some no-fly areas will be empty during part of the year while other occupied areas go unidentified. Implementation of a single point of contact should even further enhance the ability to discover similar situations.

3.2.6 Review MTR's for Modification. See responses 13, 60, and 64.

All Military Training Routes are reviewed semiannually. This review includes a flight over the route to determine not only whether it meets operational requirements but also whether there are any new obstacles such as powerlines or human habitations which must be avoided. In addition, all routes over Tohono O'odham lands are being specially scrutinized to ensure the least impact on populated areas. This practice will continue.

3.3 Proposed Actions.

The RDEIS, at Section 6.4.2, proposed three actions to be implemented. One of these, use of flight simulators, has been recategorized to a continuing action in this FEIS. Nine other actions have been added, for a total of 11 proposed actions.

3.3.1 Single Point of Contact.

This topic is broken out into a separate section in the FEIS to emphasize its importance to the success of the mitigation actions.

Although the actions set forth in Sections 3.1, 3.2, and 3.3 may appear to be separate completed, continuing, and proposed actions, there is a common thread throughout. Continued attention by Air Force officials to the conduct of these actions is an essential element of their success. Historically, discussions concerning the use of the Sells Airspace have taken place in a cyclical manner, increasing when problems occur and disappearing as problems

are resolved or when Air Force resources decrease. As a result, there is a lot of redundant conversation with the people affected by the use of the airspace, and hard feelings because the problems recur and never seem to go away. Because of the number of districts and lack of telecommunications, on-site personal contact with both the Tribal leaders and residents is important. Assigning a single point of contact as an additional duty will only perpetuate the cyclical problems of the past. The duties of the single point of contact must be assigned to a full-time position. This position is so important that the Luke Air Force Base Air Division Commander is processing a package through command channels to implement the full-time single point of contact concept as the Indian Liaison Officer.

A predominant and repeated thread throughout the public hearings in 1979 and 1986 is the need for on-site knowledgeable contact. The experience of the Davis-Monthan AFB Claims Office regarding the filing of claims and the effectiveness of the claims process also supports the need for a designated single point of contact. In the months since the 1986 hearing, one person from Luke Air Force Base has acted as the single point of contact on a part-time basis. Confidence and trust between the single point of contact and members of the Tohono O'odham leadership have only begun to develop. A full-time single point of contact would markedly enhance the communications. The value of the single point of contact has been demonstrated on several fronts--collecting data for Air Force contractors regarding the impact of noise, communications regarding downed aircraft in the Sells area, communications and understanding of the needs and desires of the Tohono O'odham people, and keeping track of who is responsible for what areas within the Tohono O'odham hierarchy.

All of the users of the Sells Airspace concur in the need for a single point of contact. The sheer number of times the position is referenced in responses to public comment and the inclusion of the single point of contact as the acting party in the continuing and proposed mitigation actions indicates the importance of the position.

3.3.1.1 Establish a Single Point of Contact for the Tohono O'odham. See responses 13, 14, 78, 79, 90, 92, 98, 102, 112, 116, and 158.

The RDEIS, at Section 6.4.2.1, proposed a single point of contact (SPC) in order to provide a more unified approach to the various problems discussed in the DEIS and RDEIS. The Air Force will cooperate with the Tohono O'odham Tribal Chairman and Chairman of the Tribal Council. To avoid diffusion of effort and to keep lines of communication as uncluttered as possible, the Air Force will assign a single point of contact with responsibility for dealing with problems arising from the continued use of the Sells Airspace.

In cooperation with the Tohono O'odham Tribal Chairman and the Tribal Council, the single point of contact will institute a continuing program of visitations at the Tribal and District levels to improve communications. The SPC also plays critical roles in some of the other proposed and continuing actions, as explained in the appropriate sections.

3.3.1.2 Establish a Single Point of Contact for the OPCNM. See response 15.

The RDEIS, at Section 6.4.2.2, proposed a single point of contact with the Organ Pipe Cactus National Monument. The single point of contact discussed in Section 4.3.1 above will be responsible for handling all problems that may arise from aircraft operations over the monument. The single point of contact will coordinate with the Monument Supervisor in enforcing avoidance of designated areas and in discussing other procedures for minimizing impact on the monument and its visitors.

3.3.1.3 Provide Claims Assistance. See response 123.

The Air Force claims program is the vehicle for reimbursement for damages caused during use of the airspace. Many commenters at the 1979 public hearing complained about the inadequacy of that system. The complaints centered around several factors: difficulty understanding the forms, misunderstanding of the requirement for a cause and effect relationship, inability to make contact with Air Force representatives, the amount of documentation required, and the length of time required to adjudicate the claims.

The single point of contact identified in Section 4.3.1 above will reestablish those visits begun in 1980. Specific objectives of these visits will be to overcome the misperceptions about the claims process while educating the populace with the process. Use of the single point of contact will ensure the program is not discontinued and will ensure that both complaints and reimbursements for any damages flow through similar Air Force channels.

3.3.1.4 Data Collection. See response 13.

The single point of contact will discuss concerns with Tohono O'odham officials and residents in areas where overflights lead to continuing irritation or disturbance. These discussions will provide data that will enable the Air Force to consider possible changes in flight patterns or procedures to reduce irritation and annoyance.

3.3.1.5 Follow-Up on Violations Reported by the Tohono O'odham. See responses 12, 102, and 112.

The single point of contact will be frequently available on the reservation as well as by telephone to receive reports of violations of no-fly areas and route floors. Every effort will be made to identify offenders and initiate disciplinary action. In the past, the lack of modern communications throughout the area has caused reports to be submitted too late for investigation, or not at all. The frequent visits of the single point of contact to the Tohono O'odham capital and districts will make it possible for people who may observe violations to report them in sufficient time, and with sufficient detail, to make investigation possible.

3.3.1.6 Follow-Up on Violations Reported by the OPCNM. See responses 17 and 35.

The Air Force will investigate reports submitted by the Superintendant, Organ Pipe Cactus National Monument. Every effort will be made to identify offenders and initiate disciplinary action.

3.3.1.7 Visit Districts. See responses 14 and 112.

Consistently since the first DEIS for Sells was written in 1975, the dialogue between the Indians and the Air Force has warmed or cooled in direct proportion to the degree of contact between the two parties. The greater the communication the lower the level of complaints about aviation impact.

One difficulty in maintaining communications is the geopolitical structure of the Tohono O'odham. The Tohono O'odham Lands are divided into eleven districts. Nine of these form a contiguous block of land over which the Sells Airspace predominantly lies. Politically, the Tohono O'odham are organized into tribal and district levels. The Tribal Chairman and Vice-Chairman, along with the Tribal Council, have their offices at Sells, AZ--the Tribal Headquarters. Likewise, each of the eleven districts has a district chairman and a district council. To establish and maintain a continuing level of communication, the single point of contact will be required to periodically visit each of the district capitals, especially those underlying the Sells MOA. These visits, to be made on a quarterly basis, are to familiarize and orient both the Indians and the Air Force as to the other's needs and life styles. This visitation program is to be in addition to the single point of contact's much more frequent visits to the Tribal Headquarters at Sells.

3.3.1.8 Inform Staff of Relations with Indians. See response 14.

The point of contact will periodically inform senior officers at Luke AFB and other bases whose aircraft fly in or under the Sells Airspace of the status of relationships with the Tohono O'odham. In these discussions the SPC will identify Air Force practices and procedures which may be irritants and discuss ways of improving relationships. In the event that suggested changes can not be approved, the SPC will keep the Tohono O'odham informed of the reasons why a procedure cannot be changed.

3.3.1.9 Meet with Tribal and District Officials.

A prime function of the single point of contact is to meet on a frequent and regular basis with the Tohono O'odham leadership. The purpose of these meetings is to initiate and foster a dialogue between the Indians and the Air Force, to work issues, resolve problems, and generally be an available point of contact. All too many issues in the past have just continued to be an irritant due to a lack of communications between the Tohono O'odham and the Air Force.

3.3.1.10 Brief Other Units. See response 35.

Although Luke AFB is the prime manager for the Sells Airspace, it is far from being the only user of the airspace. Many other units, not only from Arizona/California area bases, but also those which fly in periodically for exercises, use this airspace.

A function of the single point of contact would be to act as a briefer to these organizations on the peculiarities and restrictions of operating within the Sells Airspace. This action would help to prevent unknowing deviations from standard practices, thus reducing impacts on the Tohono O'odham and the OPCNM.

3.3.2 Limit Luke MTR Floors. See response 13.

Luke Air Force Base lowered the floors of many military training routes in Arizona from 500 to 300 feet above ground level to satisfy new training requirements. All segments of Luke MTRs that overlie the Tohono O'odham Lands, however, were left at 500 feet to minimize the impact of flights on the people under the MTR's. Efforts will be made in future planning to keep the floors of these route segments as high above ground level as mission requirements will allow.

4.0 Corrections to the RDEIS

Any document the size and complexity of the RDEIS is bound to contain spelling, typographical, and punctuation errors that are missed in the editing and review process. Most of these types of errors do not affect the meaning or clarity of the RDEIS. Thus, only those corrections which are needed to assure meaning, clarity, and factual accuracy (including correct spelling of proper names) are provided. Corrections are listed by page number, paragraph, and/or line number. Paragraph numbering commences with the top paragraph, whether full or partial.

1. Page 2.29, Table 2.6-5.

Summary of Carpet Boom Probabilities			
Location	Chance of Hearing No Booms	Chance of Hearing 1 or More Booms	Chance of Hearing 3 or More Booms
Ellipse Center	53.6 %	45.9 %	1.66 %
Ellipse Average	73.6 %	26.4 %	0.26 %
Ellipse Edge	85.7 %	14.6 %	0.04 %

2. Page 2-32, Paragraph 2.6.2.5.1: Add the following subparagraph:

"The Tumamoc globeberry (Tumamoca macdougalii), an endangered species, and the Thorber's fishhook (Mammillaria thornberi), proposed for listing as threatened, are found on the lands under the Sells Airspace."

3. Page 2-33, Paragraph 2.6.2.5.3: Add the following subparagraph:

"The desert pupfish (Cyprinodon macularis) was listed as endangered on March 31, 1986. Critical habitat for this species is the Quitobaquito Spring on the Organ Pipe Cactus National Monument."

4. Page 2-33, Paragraph 2.6.3.1: Change last sentence to read: "Its population is about 2,800; the population of the entire reservation is about 9300 people."

5. Page 2-34, Paragraph 2.6.3.2: Add the following sentences: "The Tohono O'odham have a somewhat lower estimate of their own population than the Tohono O'odham Agency of the Bureau of Indian Affairs. The figures in Paragraph 2.6.3.1. above were obtained from the Tohono O'odham Community Planner."

6. Page 4-2, Paragraph 1. This paragraph is replaced with the following because of Luke AFB's plans not to fly below 500 feet AGL:

"The areas of greatest impact will continue to be the areas directly beneath the MTRs, but away from established communities. As indicated by comparing Table 4.3-1 to Table 2.6-1, the DNL for these areas will increase by four to five dB over existing levels. This is due to a projected increase in sortie rates by Luke AFB based aircraft. The base altitude of MTRs scheduled by Davis-Monthan AFB will remain at current levels. As noted in Chapter 2, the DNL is calculated using F-16 aircraft at 500 feet AGL, since the F-16 is the predominant user of the MTRs scheduled by Luke AFB. The DNL of 66 dB where several MTR segments coincide represents the absolute worst case (every sortie passing over the same spot on the ground during a 24 hour period). Table 4.3-1 also shows the DNL for the more reasonable case of 25% of all sorties passing over the same spot on the ground (a conservative estimate). The DNL of 60 dB means 9% of all people beneath the MTR segments that coincide would be highly annoyed. The four to five dB increase in noise levels would be noticeable by persons living under the MTRs; however, these areas are so sparsely populated that the actual number of affected individuals would be small."

NOTE: A corrected Table 4.3-1 follows in item 7, and the revised dB values in the table are used in the summary of this FEIS.

7. Page 4-3, Table 4.3-1:

Future Sortie Rates and DNL Values for the Sells Airspace
Military Training Routes (CY 1990)

VR	No. of Sorties	No. of Sorties/Day	DNL ¹ (dB)	DNL ² (dB)	No. of People ³	Length ⁴
223	4531	20.0	65	59	780	172 (98)
239	401	2.0	55	49	9260	340 (85)
243	765	3.4	57	52	4510	227 (125)
244	687	3.0	57	51	6750	273 (82)
246	188	1.0	52	46	5600	268 (84)
1219	42	0.2	--	--	6960	251 (26)
259	858	4.0	58	52	5980	351 (101)
260	858	4.0	58	52	5040	311 (109)
263	600	3.0	57	51	3680	236 (88)
223 ⁵	5406	24.0	66	60	320 ⁷	(40)
223 ⁶	5607	26.0	66	60	670 ⁷	(85)

1. DNL calculated for F-16 at 500 feet AGL vs 300 feet AGL used in the RDEIS.
2. Represents DNL for 25% of sorties passing over same point on the ground.
3. Population estimated from county census data. The population data is for the entire route, which extends beyond the Sells Airspace boundaries.
4. The MTR length is shown in statute miles (average width is nine miles).
5. Where VRs 223, 244 and 246 coincide.
6. Where VRs 223, 239, 243 and 246 coincide.
7. See response 6, page 2-4, of this FEIS for population density factor.
8. "--" indicates there are not enough daily sorties to calculate the DNL.
9. "(") indicates the length of the MTR over Tohono O'Odham Lands.

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